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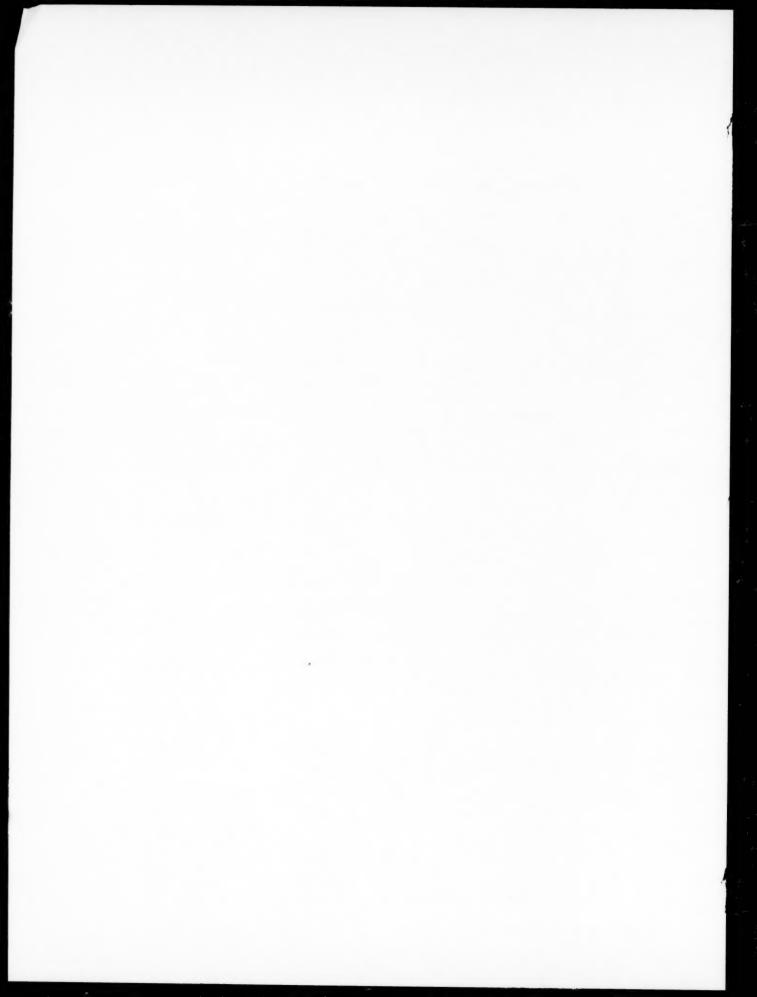


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C₇H₈O 1) Cresols, mercuration, 2172; 2) anisole, condensation with vinyl ethyl ether, 332; benzylation, 2252; 3) benzyl alcohol, benzylation of aromatic hydrocarbons with, 2249; condensation with phenols, 2239; 4) 1,5-heptadiene-3-ine-7-ol, preparation, properties, hydrogenation, 1151; 5) 1,6-heptadiene-3-ine-5-ol, preparation, properties, hydrogenation, isomerization, 1151.

C₇H₈O₂ Furyl allyl alcohol, preparation, properties, acetate, 663.

C7H₈S p-Thiocresol, reaction with organo-metallic compounds, 2167.

- C₇H₉N 1) Benzylamine, reaction with urea derivatives, 963; 2) o-toluidine, condensation with 1,2-propylene glycol and acetone, 492; 3) p-toluidine, condensation with 1,2-propylene glycol and acetone, 492.
- C₇H₁₀O 1) 1,3,5-Heptatriene-7-ol, preparation, properties, hydrogenation, 1152; 2) 1,3,6-heptatriene-5-ol, preparation, properties, isomerization, 1152; 3) 2,4-dimethyl cyclopenten-2-one-1, preparation, hydrogenation, 1562.

C₇H₁₀O₅ 1) %-keto pimelic acid, ester of, 671; 2) acid ester of acetaldol and malonic acid, preparation, 465.

C₇H₁₀N₂ 2-Dimethylaminopyridine, preparation, reaction with formal-

dehyde, 1232.

C₇H₁₂O₂ 1) Lactone of γ-methyl-γ-hydroxycaproic acid, formation, properties, conversion to salt and amide, 901; 2) β-methyl cyclohexanone, oxidation, 1257; 3) ethyl ether of dimethylacetylenylcarbinol, preparation, properties, condensation, 762; 4) methoxy-methyl ether of dimethylacetylenylcarbinol, preparation, properties, electrolytic hydrogenation, 876.

C7H12O7 Methyl ether of 2-keto-1-gulonic acid, preparation, pro-

perties, 2142.

- C7H14O 1) Methylethylallylcarbinol. synthesis, action of sulfuric acid on, 437; 2) 3-methyl-hexene-3-ol-6, formation, properties, oxidation, 440; 3) methylethylcyclopropylcarbinol, preparation, reaction with formic acid, 900; 4) 2,4-dimethylcyclopentanol-1, preparation, dehydration, 1564; 5) n-dipropylketone, condensation with acetone, 292; 6) di-isopropyl ketone, condensation with acetone, 292; 7) vinylisoamyl ether, synthesis, properties, 2132; 8) a-propylfuranidine, conversion to a-propylpyrrolidine, 175; 9) β-propylfuranidine, conversion to β-propylpyrrolidine, 174; 10) δoxide of 1-methyl-1-ethyl tetramethylene (4-methyl-4-ethyl-tetrahydrofuran) formation, oxidation, 891.
- C₇H₁₄O₂ Methoxymethyl ether of dimethylvinylcarbinol, preparation, properties, 880.
- C₇H₁₅N 1) 1-2,6-Dimethylpiperidine, isolation from the plant Nanophyton Erinaceum, 1587; 2) α-propylpyrollidine, formation from α-propyl furanidine, 175; 3) β-propylpyrollidine, formation from β-propyl furanidine, 174.

C₇H₁₈O Heptanol-4, preparation, acetate, 113¹4.

7 III

C₇H₄O₂N₂ 1) p-Nitrobenzonitrile, preparation, 306; 2) m-nitrobenzonitrile, preparation, 305.

C7H4NCl 1) o-Chlorobenzonitrile, preparation, 306; 2) p-chlorobenzonitrile, preparation, 306.

C₇H₅OCl 1) Benzoyl chloride, condensation with 2-amino pyridine, 199;
2) o-chlorobenzaldehyde, condensation with malonic anhydride, 464;
3) m-chlorobenzaldehyde, condensation with malonic anhydride, 465;
4) p-chlorobenzaldehyde, condensation with malonic anhydride, 464.

C₇H₅O₈S Sulfosalicylic acid, hydrolysis, 1087.

- C₇H₆N₂Br₂ 2,5-Toluoquinonedibromodiimide, 1921.
- C7H7ON Benzamide, internal friction

in system with iodine chloride, 407.

C7H7O2N 1) o-Nitrotoluene, system with nicotine, 1629; 2) p-nitrotoluene, system with nicotine, 1629; 3) o.m.p-aminobenzoic acid interaction with potassium chloroplatinate. 261.

C7H8N4S2 3,7-dimethyl-2,6-dithiopurine. synthesis, properties, methylation,

C7H9ON3 β-phenyl semicarbazide, synthesis, absorption spectrum, 514.

C7H100N2 2,5-Diaminoanisole, preparation, properties, 1921.

C7H12OS 1) 2,2-Dimethyl-tetrahydro-1-thiopyran-4-one, condensation with magnesium vinyl acetylene bromide, reaction with butyl magnesium chloride, 402; 2) 2,5dimethyl-tetrahydro-l-thiopyrane-4-one, condensation with magnesium vinyl acetylene bromide, reaction with butyl magnesium chloride, 403.

C7H13OCl 1) 1-Ethoxy-3-chloropentene-4, reaction with sodium hydrosulfite, 888; 2) 1-ethoxy-5-chloropentene-3, reaction with sodium hydro-

sulfide, 889.

C7H13O3P 2-Methyl-4-dimethylphosphonebutadiene-2,3, formation, 103.

C7H14OS 1-Ethoxypentene-3-thiol-5, preparation, properties, conversion to thioether, oxidation, 888.

C7H15ON 2-Ethyl-5-methylmorpholine, preparation, properties phenyl thiourea derivatives, 682.

C7H16Cl2Sn 4-Propyl-n-butyl-dichloro-tin, preparation, 2077.

 $C_7H_{17}O_2N$ α -Methyl- β , β '-dihydroxydiethylamine, preparation, properties, dehydration, picrate, 680.

7 IV

C7H6ON2Br2 2-Methoxy-1,4-benzoquinonedibromdiimide, preparation, properties, 1920.

C7H6O2Cl2S 2-Chlorotoluene-4-sulfonyl chloride, preparation, 1885.

C7H6NFS2 2-Methylmercapto-6-fluorobenzthiazole, preparation, properties, absorption maximum, ethyl iodide, conversion to thiocyanine, 2190.

C7H7OSB1 Product of reaction of pthiocresol with triphenyl bismuth. 2168.

C7H7O2ClS p-Toluenesulfonyl chloride,

preparation, 1884.

C7H1002N2S N-(4-methylthiazolyl-2)urethane, preparation, properties, 958.

C7H15O3SK Isomeric alkyl sulfonates, synthesis, properties, surface tension, 2165.

Group Ca

8 I

CaHa Styrene, polarographic study, 57; sulfonation, 1941.

C_BH₁₀ 1) Ethyl benzene, formation, 488; preparation, 471; 2) m-xylene, viscosity of system with methyl alcohol, 1481; benzylation, 2251; 3) xylene, solubility of oxygen in, 67.

C₈H₁₂ 1,3,5-octatriene, formation,

properties, 1154.

CaH14 1) Diisobutenyl (2,5-dimethyl-1,5-hexadiene) contact isomerization, 727; diisocrotyl (2,5-dimethyl-2,4-hexadiene) preparation, partial reduction, 727.

CaHla 1) 2,5-Dimethyl-2-hexene, formation, properties, ozonation, combination dispersion spectrum, 727; 2) 2,5-dimethyl-3-hexene, preparation, properties, bromination, combination dispersion spectrum, structure, 445.

CBH18 2,2,4-trimethylpentane, aromatization on Mo catalyst, 2329.

II

C8H4O3 Phthalic anhydride, conversion to chlorophthalic anhydride. 501.

C8H7N Nitrile of phenylacetic acid,

preparation, 306.

C8H8O Acetophenol, synthesis with nicotine, 2203; condensation with acetomalonic anhydride, 463; reactivity, 2299.

C₈H₈O₂ 1-(α-furfurylidene)-propanal, condensation with ketones, 1127. CaHaO3 2-Hydroxy-5-methoxybenzalde-

hyde, synthesis, 385.

C₈H₁₀O 1) 1,6-Octadiene-3-ine-5-ol, preparation, hydrogenation, 1153; 2) phenylmethylcarbinol, reaction with toluene and xylene, 2252.

C₈H₁₀O₅ 1) Aldehydo-acid, product of hydrolysis of 1-butyoxycyclopropane-2-carboxylic acid, 2109, 2119; 2) acid, product of hydrolysis of an ester of 1-acetoxycyclopropanone-2-carboxylic acid, 2393.

C₈H₁₁N 1) Ethylaniline, system with pyridine and quinoline, 1175; 2) dimethylaniline, azo derivative, 299; 3) nitrile of 2-methyl-Δ³-cyclohexenecarboxylic acid, preparation, alcoholysis, dehydrogen-

ation, 79.

C₈H₁₂O 1) 1,3,5-Octatriene-7-ol, preparation, properties, hydrogenation, isomerization, 1154; 2) 1,3,6-octatriene-5-ol, preparation, properties, hydrogenation, isomerization, 1152; 3) 2,4,6-octatriene-1-ol, preparation, properties, hydrogenation, 1154; 4) isopropylvinylethynyl carbinol synthesis, hydration, 2264; 5) 2-methyl-Δ³-cyclo hexene-aldehyde, preparation, oxidation, 80.

C₈H₁₂O₂ 2-Methyl-△³-cyclo hexene carboxylic acid, preparation, properties, ethyl ester, nitrile, amide, silver salt, ozonation, 79, 83.

C₈H₁₂O₃ Ethylideneacetoacetic ester, condensation with piperylene, 76.

C₈H₁₂O₄ Ethyl ester of 1-acetoxy cyclopropane-2-carboxylic acid, preparation, properties, conversion, 2385.

C₈H₁₄O 3-Methyl-3-hepten-5-one, preparation, reaction with methyl

magnesium iodide, 905.

C_BH₁₄O₂ 1) Tetramethylbutynediol, condensation with phenol, 923; attempt at acetylation of, 1124; incomplete ethers, 757; 2) methoxy methyl ether of methylethylacetylenylcarbinol, preparation, properties, electrolytic hydrogenation, 879; 3) ethoxy methyl ether of dimethylacetylenylcarbinol, preparation, properties, electrolytic hydrogenation, 871; 4) 1-methoxy-5-methyl-4-hexen-3-one, oxidation with ketoxides, 2267; 5) 2-methyl

5-isopropyltetrahydro-4-furanone, preparation, properties, semicarbazone, 2265; 6) 2-isopropyltetrahydro-4-pyrrone, preparation, properties, semicarbazone, 2265.

C₈H₁₄O₃ 1) α,β,β,-Trimethyllevulinic acid, preparation, oxidation, 1908; 2) 1-butoxycyclopropane-2-carboxylic acid, hydrolysis of its esters, 2109, 2119; 3) α-ketoxide, product of oxidation of 1-methoxy-5-methyl-4-hexen-3-one, preparation, properties, conversion, 2270.

 $C_8H_{14}O_5$ Diacetate of diethylene glycol,

preparation, 1122.

 $C_8H_{14}N_4$ NN^{\dagger} -di-(β -cyanoethy1)-ethylene diamine, preparation, properties, 2142.

C₈H₁₅N Nitrile of caprylic acid, preparation, 305.

C₈H₁₆O β-Butyl furanidine, conversion to β-butylpyrrolidine, 175.

C₈H₁₆O₂ 1) Methoxy methyl ether of methylethylvinylcarbinol, preparation, properties, 882; 2) ethoxy methyl ether of dimethylvinylcarbinol, preparation, properties, 880.

C₈H₁₆O₃ 1) α-Ethoxy-n-caproic acid,
preparation, properties, 1954; 2)
α-ethoxyisocaproic acid, preparation,
properties, 1955.

C₈H₁₈O₄ l-Methoxy-5-methylhexan-4,5diol-3-one, preparation, properties,

oxidation, diacetate, 2271.

C₈H₁₆Br₂ 2,5-Dimethyl-3,4-dibromohexane, preparation, properties, 445.

C₈H₁₇N 1) β-Butylpyrrolidine, formation from β-butylfuranidine, properties, 175; 2) 1-1,2,6-trimethylpiperidine, isolation from the plant Nanophyton erinaceum, 1587.

CaH₁₈S Octylmercaptan, heating, 888.

CgH₁₉N Dibutylamine, behavior to oxidizing agents, 355.

C₈H₂₀Pb Tetra ethyl lead, action of

BiCl₃ on, 2075. C₈H₂₀Si Tetra ethyl silicon, action

of BiCl₃ on, 2075.

C₈H₂₀Sn Tetra ethyl tin, action of BiCl₃ on, 2075.

8 III

C₈H₃O₃Cl 1) 3-Chlorophthalic anhydride, preparation, 503; 2) 4-chlorophthalic anhydride, preparation, 503.

CaH3OsN 1) 3-Nitrophthalic anhydride, preparation, conversion to phthalic acid chloride, 503: 2) 4-nitrophthalic anhydride, preparation, 503.

CaH404Cl2 3,5-Dichlorophthalic

acid, synthesis, 1911.

CaH-OBr ()-Bromoacetophenone, reaction with methylene base of the thiazole series, 1971.

CaHaOaHg 1) o-Ditolyl mercuryformate, preparation, properties, 346; 2) p-ditolyl mercuryformate, preparation, properties, 346; 3) phenyl mercury acetate, reaction with phenols, 2171.

C8H8O3S W-Styrene sulfonic acid, preparation, properties, salts, derivatives, reaction with bro-

mine, 1943.

CaHaNaS 3-Methylbenzothiazolonimine. preparation, 1978.

CaHaON Acetanilide, alkylation, 1487. CaHaOCl a-Chloroethyl phenyl ether, synthesis, properties, 1381.

CaHaOBr a-Bromoethyl phenyl ether, synthesis, properties, 1382; activation of vinyl alkyl ethers, 652.

CaH₁₀ON₂ 1) α-Acetylphenylhydrazine, synthesis, absorption spectrum, 1729; 2) β-acetylphenylhydrazine, synthesis, absorption spectrum, 1729, 3) 4-nitrosodimethylaniline, azo compounds, 299.

C8H10O2N4 4-Nitrodimethylaniline, azo compounds, 299.

CaHloNCl 4-Chlorodimethylaniline, azo compounds, 299.

CaHloNBr 4-Bromodimethylaniline, azo compounds, 299.

CaHloNI 4-Iododimethylaniline, azo compounds, 299.

CaH11 ON 4-Hydroxydimethylaniline, azo compounds, 299.

C₈H₁₁ON₃ β-(m-tolyl)-semicarbazide, synthesis, absorption spectrum, 514.

C_BH₁₄OS 2,3,6-trimethyl-tetrahydrothiopyran-4-one, condensation with vinyl acetyl magnesium bromide, 404.

C8H14O4S Thiodiglycol diacetate, pre-

paration, 1123. C₈H₁₇ON 2,6-Diethylmorpholine, preparation, properties, phenyl thiourea, derivatives, 683.
C_BH₁₉O₂N β,β',-Diethyl-β,β'-dihydroxy

diethylamine, preparation, properties, dehydration, picrate, 683.

CaHsONS Benzothiazole-2-carboxylic acid, simpler derivatives, amino alkyl ethers, 1235.

CaH5O2NS Benzothiazole-6-carboxylic acid, simpler derivatives, amino

alkyl ethers, 1235.

CaHaNFS 2-Methyl-6-fluorobenzothiazole, preparation, properties, absorption maximum, conversion to thiocyanines, 2189.

CaHaO2Cl2P Di-acid chloride of βphenoxyethylphosphorous acid, pre-

paration, 110.

C₈H₁₁O₃NS 4-Dimethylaniline-4-sulfo acid, azo compounds, 300.

CaH1703SK Isomeric alkyl sulfonates, synthesis, properties, surface tension, 2165.

Group Ca

9 I

CoH12 1) Propyl benzene, formation, 481; 2) iso-propyl benzene, formation, 488; 3) ethyl toluene, formation, 487; 4) mesitylene, viscosity of system with alcohols, 1481; 5) cumene, benzylation, 2251.

CoH14 Xanthene, action of Cl on, 1037. CaHle Mixture of 3,5-dimethyl-2,4-heptadiene and 4-methyl-2-ethyl-1,3hexadiene, preparation, reaction with HBr, 904.

CoH18 1-Methyl-3-propyl-cyclopentane, preparation, properties, 1257.

C9H20 5,6-Dimethyl-1,5-heptadien-3ine, preparation, properties, hydration, 1906.

9 II

C9H7N Quinoline, system with ethyl aniline, 1175; interaction with cobalt-halogen complexes, 2005.

CaHaO Cinnamaldehyde, condensation with malonic acid, 627; diacetate,

CoHaO2 1) Cinnamic acid, formation, 635; reaction of its esters with Mg organic compounds, 2323; action of NO_2 on ethyl ester, 1283; 2) a-furylvinylethylnylcarbinol, preparation,

properties, hydrogenation, 1166; 3) furylpentadieneal, condensation with ketones, 1127.

C₉H₈N₂ 6-Aminoquinoline, hydrogenation condensation with urea, 959.

- C₉H₁₀O 1) Hydrocinnamic aldehyde, condensation with malonic anhydride, 461; 2) α-furylbutadienylcarbinol, formation, properties, hydrogenation, 1166; 3) allyl phenyl ester, mechanism of Claissen rearrangement in, 1965; 4) allyl-3,5-dideuterophenyl ether, preparation, use for study of the mechanism of the Claissen rearrangement, 1965; 5) anole (p-propenyl phenol) estrogenic activity and of its polymers, 2279.
- C₉H₁₀O₃ 1) 2,5-dimethoxybenzaldehyde, synthesis, 384; 2) acetyl ether of furyl allyl alcohol, preparation, properties, 668.

C₉H₁₀N₂ 4-Cyanodimethylaniline, azo compounds, 299.

C₉H₁₂O Dimethylphenylcarbinol, dehydration, 2253.

C₉H₁₂O₄ Acid malonic ester of the enolic form of mesityl oxide, preparation, 466.

C₉H₁₂O₆ Acid ester of the enolic form of acetoacetic acid, preparation, 466.

C9H₁₂N₂ 6-Amino-1,2,3,4-tetrahydro-quinoline, condensation with urea, 959.

C₉H₁₃N 1) 4-Methyldimethylaniline, azo compounds, 299; 2) nitrile of 2,5-dimethyl-Δ³-cyclohexene carboxylic acid, preparation, saponification and dehydrogenation, 973.

C₉H₁₃Cl Xanthene chloride, preparation, properties structure, 1041.

C₉H₁₄O 1) Methylisopropylvinylethinyl carbonyl, preparation, properties, hydrogenation, dehydration, hydration, 1905; 2) 5,6-dimethyl-1,5-heptadiene-4-one, preparation, properties, cyclization, 1906; 3) 1,2,2,3-tetramethyl-Δ³-cyclopenten-5-one, preparation, properties, hydrogenation, derivatives, 1906.

C₉H₁₄O₂ 1) 2,6-Dimethyl-Δ³-cyclohexene carboxylic acid, preparation, dehydrogenation, 81; 2) n-butylfuryl carbinol, synthesis, properties, isomerization, 1952; 3) iso-butylfuryl carbinol, preparation, properties, isomerization, 1952.

C₉H₁₄O₃ Ethyl ester of 2-methyl-5,6-dihydropyran-3-carboxylic acid, preparation, 1949.

C₉H₁₄O₄ 1) 1-Methylhexahydrophthalic acid, preparation, 2086; 2) ethylidene malonic ester, condensation

with piperylene, 81.

C₉H₁₄O₅ 1) Dimethyl ester of Y-ketopimelic acid, preparation, properties, 671; 2) diacetone alcohol ester of malonic acid, preparation, 465; 3) acid ester of propionic aldehyde and malonic acid, preparation, 466.

C₉H₁₅Cl 2,2,3-Trimethyl-3-chlorohexyne-4, preparation, oxidation, action of Ag acetate on, 2099.

C₉H₁₈O 1) Methyl-tert-butyl-methylethynyl-carbinol, preparation, reaction with HCl, acetate, 2099; 2) 1,2,2,3-tetramethylcyclopentan-5-one, preparation, properties, derivatives, 1907.

C₉H₁₆O₂ 1) Isopropoxy methyl ether of dimethylacetylenylcarbinol, preparation, properties, electrolytic hydrogenation, 877; 2) ethoxy methyl ether of methylethylacetylenylcarbinol, preparation, properties, electrolytic hydrogenation, 879; 3) α-cyclopentylethyl acetate, preparation, properties, pyrolysis, 508; 4) β-cyclopentylethyl acetate, preparation, properties, pyrolysis, 508.

C₉H₁₆O₃ 1) 4-Ketononanoic acid, preparation, properties, ethyl ester, 1953; 2) 7-methyl-4-ketooctanoic acid, preparation, properties, ethyl ester, 1953.

C₀H₁₇Br 5-Bromo-3,5-dimethyl-3 heptene, preparation, properties, reaction with organic Mg compounds, 906.

C₉H₁₈O 1) Vinyl-heptyl ether, synthesis, properties, 2133; 2) alcohol, product of reaction of 3-methyl-3-hepten-5-one with methylmagnesium iodide, 905.

C₈H₁₈O₂ 1) Isopropoxy methyl ether of dimethylvinylcarbinol, preparation, properties, 881; 2) ethoxy methyl ether of methylethylvinylcarbinol, synthesis, properties, 882; 3) heptanol-4 acetate, preparation, properties, pyrolysis, 1134.

C₉H_{2O}O Methylisopropylbutylcarbinol, preparation, properties, 1905. C₉H₂₂N₂ Diethylamino-4-aminopentane, behavior with oxidants, 351.

9 III

C₉H₇ON Indole-3-aldehyde, condensation, 2287.

C₉H₈O₄Hg 1) o-Tolylmercury oxalate, preparation, properties 347; 2) p-tolylmercury oxalate, preparation, properties, 347.

C₉H₉OCl α-Chlorobenzylmethylketone, preparation, properties, reaction with potassium benzoate, 1336.

C₉H₉NS 3-Methyl-2-methyl benzothiazole, reaction with methyl iodide and ethyl iodide, 149.

C₉H₁₀O₂Hg o-Tolyl mercury acetate, preparation, properties, 346.

C₉H₁₁ON 4-Dimethylaminobenzaldehyde, azo compound, 299.

C₉H₁₁OCl α-Chloroethylanisole, formation, 332.

C₉H₁₁O₂N 4-Dimethylaminobenzoic acid, azo compound, 299.

 $C_9H_{11}O_4N$ \underline{d} , $\underline{1}$ -2,5-Dihydroxyphenylalanine, synthesis, properties, 383.

C₉H₁₂ON₂ 1) β,β-Methylacetylphenyl hydrazine, synthesis, absorption spectrum, 515; 2) 4-dimethylamino benzamide, azo compound, 295; 3) 4-dimethylamino benzaldoxime, azo compound, 295.

C₉H₁₃ON 4-Dimethyl amino benzyl alcohol azo compound, 295.

C₉H₁₃O₂P 1) Methyl ester of p-tolylmethylphosphinic acid, preparation, properties, 1210; 2) methyl ester of p-tolylphosphinous acid, preparation, isomerization, 1210.

C₈H₁₄ON₂ 1) 3-Hydroxy-6-n-amylpyridazine, preparation, properties, 1726; 2) 3-hydroxy-6-isoamylpyridazine, preparation, properties, 1727.

C₉H₁₅O₃Br y-Bromopropylacetoacetic ester, preparation, 1949.

C₉H₁₆ON₂ 1) 3-Hydroxy-6-n-amyl-4,5-dihydropyridazine, preparation, properties, dehydrogenation, 1726; 2) 3-hydroxy-6-isoamyl-4,5-dihydropyridazine, preparation, properties, dehydrogenation, 1727.

C₉H₁₇OCl 1) 1-Butoxy-5-chloropentene-3, reaction with potassium hydrosulfide, 889; 2) 1-butoxy-3-chloropentene-4, reaction with potassium hydrosulfide, 889.

C₉H₁₇O₃P 2-Methyl-4-diethylphosphonebutadiene-2,3, formation, properties, dimerization, reaction with triethylphosphite, 100.

C₉H₁₈OS 1-Butoxypentene-3-thiol-5, preparation, properties, conversion

to thio ether, 889.

C_BH_{1B}O₅N N,N-Di-(propanol-2-methoxy-2)-formamide, preparation, properties, 2137.

9 IV

C₀H₇ON₂Cl 1,2-(3'-Chlorodivinylene)-6-methylpyramidone-4, preparation, properties, 1963.

C_BH₇ON₂Br 1,2-(3'-Bromodivinylene)-6-methylpyramidone-4, preparation,

properties, 1963.

C₉H₇ON₂I 1,2-(3'-Iododivinylene)-6-methylpyramidone-4, preparation, properties, 1962.

C9H8O2NCl Hippuryl chloride, reaction

with hydroxy acids, 1104.

C9H₈O₂N₂S 3-Methyl-6-nitro-2-methylenebenzthiazoline, preparation, properties, reaction with methyl iodide, 159.

C₉H₉ONS 4-Methyl-3-oxo-dihydro-(benzo-1,4-thiazine), preparation, 1978.

C₉H₇O₂N₂Cl 5-Chloro-2-acetoacetylaminopyridine, preparation, properties, reaction with 5-chloro-2-aminopyridine, action of H₂SO₄ on, 1963.

C₉H₉O₂N₂Br 5-Bromo-2-acetoacetylaminopyridine, preparation, properties, reaction with 5-bromo-2-aminopyridine, action of H₂SO₄ on, 1963.

C₉H₉O₂N₂I 5-Iodo-2-acetoacetylaminopyridine, preparation, reaction with 5-iodo-2-aminopyridine, action of H₂SO₄ on, 1962.

C₈H₁₀ON₄S₂ N,N'-Di-(4-methylthio-azolyl-2)-urea, preparation, properties, reaction with dimethyl sulfate, 957; interaction with amines, 966.

C₉H₁₀O₂Cl₃P Methyl ester of trichloromethyl-p-tolylphosphinic acid, preparation, properties, 1210.

C₉H₁₁O₂NS Anilide of allylsulfonic acid, preparation, properties, 1766.

C₉H₁₉O₃SK(Na) Isomeric alkyl sulfonates, synthesis, properties, surface tension, 2164.

10 I

- CloHa Naphthalene, electrolytic reduction, 870; condensation with halogen derivatives, 480.
- C₁₀H₁₀ α-Phenylbutadiene, sulfonation,
- C10H14 1) n-Butyl benzene, formation, 331; 2) tert-butyl benzene, action of sulfur on, 1263; 3) butyl benzene, formation, 479, 486; 4) p-cymene, viscosity of system with methyl alcohol, 1483; 5) diethyl benzenes, formation, 471.
- CloH₁₆ 1) α-Pinene, reaction with chlorine, 931; 2) β-pinene, reaction with chlorine, 931; 3) Δ^3 -carene, reaction with chlorine, 1043; 4) dipentene, reaction with chlorine, 941; 5) terpinolene, reaction with chlorine, 1037.
- CloH20 1) 3,6-Dimethyl-4-octene, preparation, properties, oxidative bromination, combination dispersion spectrum, structure, 446; 2) 3,5,5trimethyl-3-heptene, preparation, properties, hydrogenation, oxide, 907.
- C₁₀H₂₂ 3,5,5-Trimethyl-3-heptane, preparation, properties, 908.

10 II

- C₁₀H₈O₂ 1,4-Naphthoquinone, bisulfite compound, 2195.
- CloHeO Naphthol, effect on rate of soap formation, 273.
- C₁₀H₈O₄ β-Lactone of benzylmalonic acid, decarboxylation, 635.
- C₁₀H₁₀O Benzalacetone, condensation with malonic anhydride, 467.
- CloH₁₂O 1) **%**, **%**-Methylphenylallyl alcohol, formation, properties, 432; 2) methylphenylvinyl carbinol, action of H₂SO₄ on, 431; 3) anethole, demethylation, 2282.
- C₁₀H₁₂O₂ Dimethylphenylacetic acid, synthesis, properties, 621.
- C₁₀H₁₄O Butyl phenols, formation, 487.
- C₁₀H₁₄O₂ Ethyl phenyl acetal, synthesis, thermal decomposition, 651.
- C₁₀H₁₄O₃ 1) 1-(4-Hydroxy-3-methoxyphenyl)propanol-1, synthesis, derivatives, 1250; 2) 1-(4-hydroxy-3-methoxyphenyl)-propanol

- 2, isolation, properties, identification, 1247; 3) dihydroconiferyl alcohol, synthesis, properties, derivatives, oxidation, 1249.
- $C_{10}H_{14}O_4$ 2,6-Dimethyl- Δ^3 -cyclohexenel,1-dicarboxylic acid, preparation, ethyl ester, decarboxylation, 81.
- CloH14N2 1) Anabasine, system with formic acid, 809; 2) nicotine, synthesis with formic acid, 809; systems with dichloroethane, chlorobenzene, bromobenzene, carbon tetrachloride, 2199; systems with acetone, methylethyl ketone, and acetophenone, 2203; systems with nitrobenzene, onitrophenol, onitrotoluene and pritrotoluene, 1629.
- CloH₁₅Cl 1) Myrtenyl chloride, formation, 931; 2) 3-chloro-Δ⁴-carene, preparation, properties, structure, 1043; 3) carveol chloride, preparation, properties, conversion to carveol, 941; 4) pinocarveol chloride, formation, isomerization, 931; 5) terpinolene chloride, preparation, properties, structure, 1037.
- C₁₀H₁₆O 1) 2,6-Dimethyl-1-acetyl-Δ³-cyclohexene, preparation, properties, semicarbazone, 83; 2)d,1-carveol, preparation from dipentene, 943; 3) d-camphor, solubility in organic solvents, 319.
- C₁₀H₁₆O₂ 2,5,6-Trimethyl-Δ³-cyclohexene-1-carboxylic acid, preparation, diethyl ester, semicarbazone, 972.
- C₁₀H₁₆O₃ 2-Methyl-2-acetylcyclohexane carboxylic acid, preparation, oxidation, semicarbazone, 2084.
- CloHleCl2 1) 2,6-Dichlorocamphane (Aschan's), formation, 933; 2) carene dichloride, preparation, properties, 1046.
- CloHl80 1) Menthone, condensation with malonic anhydride, 463; oxidation by potassium permanganate, 639; 2) isoamyl ether of dimethylacetylenylcarbinol, preparation, properties, 762; 3) linalool, dehydration, 2252.
- C₁₀H₁₈O₂ 1) 5,6-Dimethyl-2-methoxy-5hepten-4-one, preparation, properties, behavior with methanol, 1906.
 - 2) butoxymethylether of dimethylacetylenylcarbinol, preparation, properties, 878; electrolytic hydrogenation, 880; 3) monoethyl ether of tetramethylbutynediol, preparation, properties,

hydrogenation, action of alkalies on, 757.

C10H18O6 Triethylene glycol, diace-

tate, preparation, 1124.

C₁₀H₁₈O₉ 1) Glucosido-2-erythrose, preparation, oxidation, derivatives, 122, 311; 2) galactosido-2-erythrose, preparation, oxidation, 126.

C₁₀H₁₈O₁₀ Glucosido-2-erythronic acid, preparation, calcium salt, 311; hy-

drolysis, 311.

C₁₀H₂₀O₂ 1) Butoxy methyl ether of dimethylvinyl carbinol, preparation, properties, 881; 2) monoethyl ether of tetramethylbutynediol, properties, oxidation, 761.

C10H20Br2 3,6-Dimethyl,4-5-dibromoctane,

preparation, properties, 447.

C₁₀H₂₀S Sulfide, product of reaction of 2-methylbutene-2 with sulfur, 771.

- C₁₀H₂₀S₂ 1) Disulfide, product of reaction of 2-methylbutene-2 with sulfur, 770; 2) disulfide, product of reaction of pentene-2 with sulfur, 773.
- C₁₀H₂₀S₃ 1) Trisulfide, product of reaction of 2-methylbutene-2 with sulfur, 770; 2) trisulfide, product of reaction of pentene-2 with sulfur, 773.
- C₁₀H₂₀S₅ Product of reaction of 2methylbutene-2 with sulfur, 772.
- C₁₀H₂₂O₂ Monoethyl ether of tetramethylbutanediol, preparation, properties, 761.

10 III

- C₁₀H₆N₂Br₂ 1,4-Naphthaquinonedibromodiimide, preparation, properties, 1921.
- CloH₇O₄Cl 1) β-Lactone of o-chlorobenzal malonic acid, preparation, properties, 464; 2) β-lactone of m-chlorobenzal malonic acid, preparation, properties, 465; 3) β-lactone of p-chlorobenzal malonic acid, preparation, properties, 464.

C₁₀H₈O₃S α- and β-Naphthalene sulfonic acids, preparation, properties, solubility, solubility of Na salts, 2177;

hydrolysis, 1084, 1086.

 $C_{10}H_{9}ON$ 1-Methylindole-3-aldehyde, condensation with malonic acid, 2287. $C_{10}H_{10}O_{3}S$ ω -Phenylbutadiene sulfonic

- acid, preparation, properties, salts, conversion, 1947.
- C₁₀H₁₁CCl α-Chloro-(p-tolyl) acetone, preparation, properties, reaction with potassium acetate, 1337.
- C₁₀H₁₁O₃N Methyl ester of oxalylmethylanilide, absorption spectrum, 1745.
- C_{10H₁₂O₂N₂ α,β-Diacetylphenylhydrazine, synthesis, absorption spectrum, 1736.}
- C10H12O3Hg 1) o-Tolyl mercury lactate, preparation, properties, 347; 2) p-tolyl mercury lactate, preparation, properties, 346.

C₁₀H₁₄ON₂ 4-Dimethylaminoacetanilide,

azo compound, 300.

- C₁₀H₁₆OS 2-Methylhexahydrothiochromane-4-one, condensation with vinyl acetylene, 405.
- C₁₀H₂₁O₂Cl Dibutylchloroacetal, formation, 658.
- C₁₀H₂₂O₆P₂ 2-Methyl-3,4-di-(dimethyl-phosphone)-hexene-2, formation, 103.
- C₁₀H₂₃O₅P Di-β-ethoxyisopropylphosphorous acid, preparation, properties, 110.

10 IV

- C₁₀H₅O₆S₃Cl₃ 1,3,5-Naphthalenetrisulfonyl chloride, preparation, 1888.
- C₁₀H₈ONBr 1,4-Naphthoquinonebromoimide, preparation, properties, 1920.
- $C_{10}H_7O_2ClS$ α and β -Naphthalene sulfonyl chlorides, preparation, 1887.
- C₁₀H₈O₂NBr β-Bromoethylphthalimide, synthesis, 2368.
- C₁₀H₉O₂NS Sulfamide of the naphthalene series, 979.
- C₁₀H₁₀ON₄S N-(4-Methylthiazolyl-2)-N'-(pyridyl-2)-urea, preparation, properties, 959.

C₁₀H₁₀O₂N₂S Amino sulfamide of the naphthalene series, 977.

- C₁₀H₁₂O₂Cl₃P Ethyl ester of trichloromethyl-p-tolylphosphinic acid, preparation, properties, saponification, 1211.
- C₁₀H₁₇O₂PSn Methyl ester of phenylphosphonetrimethyltin, preparation, properties, 116.
- C₁₀H₂₁O₃SK Isomeric alkyl sulfonates, synthesis, properties, surface tension, 2164.

11 I

C11H12 1) 2-Phenylpentadiene-1,4, formation, properties, oxidation, 622, 899; 2) 4-Phenyl-pentadiene-1,3, formation, 898; 3) \(\alpha\)-phenyl-\(\alpha\)-cyclo propylethylene, preparation, properties, oxidation, 895; 4) Hydrocarbon, product of the action of alkali on the chlorohydrin of 1,1-methylphenylcyclobutane-2, synthesis,

properties, 625.

C₁₁H₁₄ 1) 2,4-Dimethyl-1-vinylethinyl-Δ'-cyclopentene, preparation, hydrogenation, hydration, 2091; 2) 2-methyl-1-vinylethinyl-Δ'-cyclohexene, preparation, properties, hydrogenation, cyclohydration, hydration, 2083; 3) 1-phenylpentene-1(β-propylstyrene), reaction with sulfur, 1264; 4) 3methyl-1-phenylbutene-1, preparation, reaction with sulfur, 1265; 5) 1phenyl-2-methyl butene-1(β-methylβ-ethylstyrene) preparation, properties, reaction with sulfur, 1267.

C₁₁H₁₆ 1) Iso-amylbenzene, reaction with sulfur, 1266; 2) tert-amylbenzene, reaction with sulfur, 1268; 3) amyl benzenes, formation, 487.

C₁₁H₁₈ 3,8-Dimethyl-Δ⁵-tetrahydroindane, preparation, dehydrogenation, 921.

C₁₁H₂₂ 1) 3,5-Dimethyl-5-ethyl-3heptene, preparation, properties, hydrogenation, 908; 2) 2,4-dimethyll-butylcyclopentane, preparation, properties, 2095.

C₁₁H₂₄ 3,5-Dimethyl-5-ethyl-3-heptane, preparation, properties, 908.

11 II

C₁₁H₁₀O₄ β-Lactone of β-phenylethylidene malonic acid, preparation, 463.

C₁₁H₁₀S 1) α-Phenyl-α'-thiotolene,
preparation, 1264; 2) α-phenyl-βthiotolene, preparation, properties,
1267; 3) α-phenyl-β'-thiotolene,
preparation, properties, 1265.

C₁₁H₁₂O₂ Ethyl ester of cinnamic acid, action of NO₂ on, 1283.

C₁₁H₁₃Cl 1) 2-Phenyl-5-chloropentene-2, formation, properties, oxidation, action of alkalies on, 616, 2) chlorohydrin of 1,1methylphenylcyclobutanol-2, formation, properties, oxidation, action of alkalies on, 623.

C11H140 1) Methylphenylcyclopropylcarbinol, reaction with acids, 613; reaction with formic acid, 895; 2) methylphenylcyclobutanol, formation, properties, oxidation, 619; 3) / Y-methylbenzylallylalcohol, iormation, properties, 434; 4) methylbenzylvinylcarbinol, action of H2SO4 on, 431; 5) methylphenylallylcarbinol, preparation, reaction with HCOOH, formate, 898. 6) 2-phenylpenten-2-ol-5, formation, properties, hydrogenation, 897; 7) l-methoxytetralin, preparation, 1216.

C₁₁H₁₄O₂ 1) α-Phenyl-α-cyclopropylethylene glycol, formation, properties, 892; 2) 3,8-dimethyl-Δ⁵-tetrahydroindan-1,2-dione, preparation, properties, hydrogenation, 2,4dinitrophenylhydrazone, 920.

C₁₁H₁₄O₃ 5,8-Dimethylhydrindene-1,2,5-trione, preparation, properties, 2,4-dinitrophenylhydra-

zone, 705.

C₁₁H₁₄S 1) 2,2-Dimethyl-4-vinylethynyl-4^{4,5}-dihydrothiopyrane, preparation, properties, hydrogenation, 402; 2) 2,5-dimethyl-4-vinylethynyldihydrothiopyrane, preparation,

properties, 404.

C11H160 1) Y-Phenyl amyl alcohol, preparation, oxidation, 898; 2) 1-allyl-2,4-dimethyl- Δ^{3} -cyclopentenyl ketone, preparation, properties, hydrogenation, ozonation, hydration, 2095; 3) ally1-2-methy1- Δ^1 -cyclohexenyl ketone, preparation, properties, hydrogenation, ozonation, cyclization, 2086; 4) 2,4-dimethyl-l-vinylethynylcyclopentan-1-ol, preparation, properties, transformations, 2094; 5) 2-methyl-1-vinylethynylcyclohexan-1-ol, hydrogenation, dehydration, 2082; 6) 3,8dimethyl- Δ^5 -tetrahydroindan-1-one, preparation, properties, hydrogenation, semicarbazone, condensation with acetylene, reduction, 915; 7) 1.8-dimethyl- Δ^1 -hexahydroinden-3one, preparation, properties, hydrogenation, ozonation, derivatives, action of CH₃ONa on, 2083.

 $C_{11}H_{16}O_2$ 1) 3,8-Dimethylhydrindan-1,2-

dione, preparation, properties, 2,4dinitro phenylhydrazone, 920; 2) 3,8dimethylhydrindan-1,5-dione, preparation, properties, di-semicarbazone, 700; 3) 9-methyl-1,6-diketodecalin, formation, properties, 691.

C₁₁H₁₈O 1) 1,8-dimethylhexahydrindan -3one, preparation, properties, 2084; 2) 3,8-dimethylhydrindan -1-one, preparation, properties, semicarbazone, 915.

C₁₁H₁₈O₂ 1) Ethyl ether of n-butylfuryl carbinol, preparation, properties, 1954; 2) ethyl ether of iso-butylfuryl carbinol, preparation, properties, 1954; 3) 2,2,3trimethyl-3-acetoxyhexyne-4, preparation, properties, 2105; 4) bicyclic pyrone, preparation, properties, 2096.

C11H18O5 Diethyl ester of Y-ketopimelic acid, preparation, properties, 672.

C₁₁H₂₀O 1) Propyl-2.4-dimethylcyclopentenyl ketone, preparation, properties, 2095; 2) propyl-2-methylcyclohexyl ketone, preparation, 2086.

C₁₁H₂₀O₂ Pentoxy methyl ether of dimethylacetylenylcarbinol, preparation, properties, electrolytic reduction, 878.

C₁₁H₂₀O₁₁ 1) Glucosido-3-arabonic acid, preparation, Ca salt, oxidation, 121, 309; 2) galactosido-3-arabonic acid, preparation, oxidation, 125.

C₁₁H₂₂O 1) 2,4-Dimethyl-l-vinyl ethynylcyclopentan-1-ol, preparation, properties, 2094; 2) 1-butyl-2-methyl cyclohexan-1ol, preparation, properties, 2082; 3) di-n-amyl ketone, condensation with acetylene, 292.

CliH2202 Pentoxy methyl ether of dimethyl vinyl carbinol, preparation, properties,

881.

C₁₁H₂₂S 2,2-Dimethyl-4-butyltetrahydrothiopyran, preparation, properties, 402.

11 III

- C₁₁H₇O₃N . 5-Nitro-1-naphthaldehyde, separation from 8-nitro-1-naphthaldehyde.
- C₁₁H₁₀ON₄ N, N'-Di-(pyridyl-2)-urea, reaction with amines, 963.
- C₁₁H₁₀N₂S 2'-Amino-3,4-dihydronaphthothiazole-1,2, preparation, properties, derivatives, 1722.
- C₁₁H₁₁ON 1,2-Dimethylindole-3-aldehyde, preparation, condensation with malonic acid and with ethyl cyanoacetate, 2287.

- C11H11O3P 2-Phosphonemethylnaphthalene, preparation, properties, 1298.
- C11H11O5N Hippurylglycolic acid, 1103.
- C11H12OeN2 Product of the addition of N2O3 to the ethyl ester of cinnamic acid. 1286.

C11H12O7N2 Product of addition of N204 to the ethyl ester of cinnamic acid, 1288.

C₁₁H₁₅O₂N₃ α-(Dimethylamidooxalyl)β-methylphenylhydrazine, synthesis, absorption spectrum, 1730.

C₁₁H₁₆OS 1) 2,2-Dimethyl-4-vinylethynyltetrahydrothiopyran-4-ol, preparation, properties, dehydration, hydrogenation, 403; 2) 2,5dimethyl-4-vinylethinyltetrahydrothiopyran-4-ol, preparation, properties, isomers, dehydration, 404.

C₁₁H₁₇O₂P 1) Ethyl ester of p-tolyl phosphinous acid, preparation, properties, isomerization, 1210; 2) ethyl ester of p-tolylethylphosphinic acid, preparation, properties, 1210; 3) propyl ester of methyl-p-tolylphosphinic acid, preparation, properties, 1211.

C11H22OS 1) 2,2-Dimethyl-4-butyltetrahydrothiopyran-4-ol, preparation, properties, 403; 2) 2,5-dimethyl-4-butyltetrahydrothiopyran-4-ol, preparation, properties,

C₁₁H₂₃O₅N N,N-di-(propanol-2-ethoxy-3)-formamide, preparation, properties, 2138.

11 IV

 $C_{11}H_{13}O_2N_2C1$ β -(5-Chloropyridy1-2-)--aminocrotonic ester, preparation, properties, 1961.

 $C_{11}H_{13}O_2N_2Br$ β -(5-Bromopyridyl-2-)aminocrotonic ester, preparation,

properties, 1961.

 $C_{11}H_{13}O_2N_2I$ β -(5-Iodopyridyl-2-)aminocrotonic ester, preparation, properties, 1960.

C₁₁H₁₄ON₄S₂ Product of reaction of NN'-di-(4-methylthiazolyl-2)urea with dimethyl sulfate, 958.

C11H14O2Cl3P Propyl ester of trichloromethyl-p-tolylphosphinic

acid, preparation, properties, 1211. C₁₁H₂₃O₃SK Isomeric alkyl sulfonates, synthesis, properties, surface tension, 2164.

Group C12

12 I

C₁₂H₈ Acenaphthylene, preparation, 1881.
C₁₂H₁₈ 1) 5-Tert-butyl-6-methyl-1,5-hep-tadien-3-ine, preparation, properties, transformation, 1512; 2) diisopropyl-benzene, formation, 488; 3) 1,3,5-triethylbenzene, formation, 472; 4) β-vinyl-octalin, preparation, properties, addition product with maleic anhydride, condensation with 1,3-dimethyl-Δ'-cyclopenten-5-one, 566; 5) 1-vinyl-'-octalin, preparation, properties, condensation with Δ'-cyclopentene-5-one, 565.
C₁₂H₂₄ 5-Tert-butyl-6-methyl-5-heptene, preparation, properties, 1512.

12 II

C₁₂H₁₀O₄ 1) Cinnamylidene malonic acid, formation, 627; 2) β-lactone of cinnamylidene malonic acid, preparation, properties, 629.

C₁₂H₁₀N₂ Eleagnine (tetrahydrograbine),

structure, 1995.

C₁₂H₁₀Hg Diphenyl mercury, photoreaction with iodobenzene, 178; with benzyl iodide and chloride, 180; reaction with phenols, 2171; with thiophenols, 2167.

C₁₂H₁₁N Diphenylamine, solubility in water, 227; reaction with acrolein, 497.

C₁₂H₁₂O₄ β-Lactone of hydrocinnamal malonic acid, preparation, 464.

C₁₂H₁₃N 4-Methyl-2-ethylquinoline, syn-

thesis, 492.

- C₁₂H₁₄O₂ 1) Methylphenylallylcarbinol formate, 899; 2) β-tetrallyl acetic acid (1,2,3,4-tetrahydro-6-naphthylacetic acid), synthesis, properties, amide, acid chloride, 146; 3) ester, product of the action of formic acid on methylphenylcyclopropylcarbinol, 895.
- C₁₂H₁₄N₂ N-(1-Naphthyl)-ethylenediamine dihydrochloride, synthesis, 2370.
- C₁₂H₁₆O 7-Methoxy-5-isobutenyl-1,5-heptadien 3-ine, preparation, properties, 1650.

C₁₂H₁₆S 2,3,6-Trimethyl-4-vinylethynyltetrahydrothiopyran, synthesis, properties, 405.

C₁₂H₁₈O 1) 1-Ethynyl-1-decalol, synthesis, hydrogenation, 565; 2) 5-isobutyl-7-methoxy-1,5-heptadien-3-ine, preparation, properties, hydrogenation, hydration, 1649; 3) α-phenyl ethyl butyl ether, synthesis, properties, condensation

with benzene, 331.

- $C_{12}H_{18}O_2$ 1) 5- β -Methoxypropyl-7methoxy-1,5-heptadien -3-ine, preparation, properties, hydrogenation, 1899, 2) β-methoxyethylisobutenylvinylethinylcarbinol, preparation, properties, hydrogenation, is merization, 1647; 3) Δ^6 -9-methyl-6-methoxy-1-octalone, preparation, properties, semicarbazone, hydrogenation, hydrolysis, condensation with acetylene, 690; 4) 3,8-dimethyl-5-methoxy- Δ^5 -tetrahydroindan-1-one, preparation, hydrogenation, hydrolysis, condensation with acetylene, 699; 5) butyl phenyl acetal, preparation, thermal decomposition, 649.
- C₁₂H₁₈O₇ Diacetone-2-keto-<u>1</u>-gulonic acid, conversion into <u>1</u>-ascorbic

acid, 2145.

- Cl2H2OO 1) Isopropyl tert-butylvinylethynylcarbinol, preparation, properties, transformation, 1511; 2) 5-tert-butyl-6-methyl-1,5-heptadien-4-one, preparation, properties, transformation, 1512; 3) 1-vinyl-1-decalol, synthesis, dehydration, 565; 4) 2-vinyl-2-decalol, synthesis, dehydration, 566; 5) 2,2,3-trimethyl-1-tert-butyl-2^{3,4}-cyclopenten-5-one, preparation, properties, transformation, 1512.
- C₁₂H₂₀O₂ 1) Isobutyl-β-methoxyethyl-vinylethynylcarbinol, preparation, hydrogenation, dehydration, 1646;
 2) 5-isobutyl-7-methoxy 1,4-heptadien-β-one, preparation, properties, hydrogenation, ozonation, cyclization, action of NH₃ on, 1648; 3) 5-isobutyl-7-methoxy-1,5-heptadien-4-one, preparation, properties, hydrogenation, ozonation, cyclization, action of NH₃ on, 1650; 4) 9-methyl-6-methoxy-1-decalone, preparation, properties, semicarbazone, 691; 5) 5-methoxy-3,8-dimethylhydrindan-1-one, preparation,

properties, 701; 6) β-lactone of methylideneacetic acid, properties, decomposition, structure, 637; 7) cyclopentenone, product of cyclization of 5-isobutyl-7-methoxy-1,5-heptadien-4-one, preparation, properties, transformation, 1652.

C₁₂H₂₀O₃ 1) β-Methoxyethyl-β-methoxypropylvinylethynyl carbinol, preparation, properties, hydrogenation, dehydration, isomerization, hydration, 1898; 2) 5β-methoxyethyl-7-methoxy-1,4-octadien-3-one, preparation, properties, hydrogenation, 1899.

C₁₂H₂₀O₈ Mannitol triacetal formation, 709. C₁₂H₂₀N₂ p-Aminodipropylaniline, reaction with urea derivatives, 963.

C₁₂H₂₂O 2,2,3-Trimethyl-1-tert-butylcyclopentan-5-one, preparation, properties, 1513.

C₁₂H₂₂O₂ Cyclopentanone, product of hydrogenation of a substance of empirical formula C₁₂H₂₀O₂, preparation, properties, 2,4-dinitrophenyl hydrazone, 1652.

C₁₂H₂₂O₁₁ 1) Maltose, determination of structure, 121; 2) lactose, determination of structure, 125; 3) cellobiose, structure, 309.

C₁₂H₂₄O 5-Tert-butyl-6-methyl-heptan-4one, preparation, properties, 1513.

C₁₂H₂₄O₃ 5-β-Methoxyethyl-7-methoxy octan -4-one, preparation, properties, 1899.

C₁₂H₂₄S₃ Trisulfide, product of reaction of 2,3-dimethylbutene-2 with sulfur, 774.

C₁₂H₂₆O Isopropylbutyl-tert-butyl carbinol, preparation, properties, 1511.

C₁₂H₂₈O₂ 1) Butyl-isobutyl-β-methoxy ethylvinyl-ethinylcarbinol, preparation, properties, 1647; 2) 5-β-methoxyethyl-7thoxyoctane, preparation, properties,

C₁₂H₂₆O₃ Butyl-β-methoxyethyl-β-methoxypropyl carbinol, preparation, properties, 1898

12 III

- C₁₂H₇O₂N (5-Nitronaphthyl-1)-acetylene, preparation, properties, 1546.
- C₁₂H₁₀ON₂ Monobenzoyl-2-aminopyridine, formation, 201.
- C₁₂H₁₀OHg Product of mercuration of phenol, 2175.
- C₁₂H₁₀S₂Hg Mercury thiophenolate, preparation, properties, 2167.

C₁₂H₁₀S₂Pb Lead thiophenolate, preparation, properties, 2168.

C₁₂H₁₁O₂N β-(1-Methylindolyl-3)acrylic acid, preparation, properties, 2293.

C₁₂H₁₄O₈P₂ 1,4-Diphosphonemethylnaphthalene, preparation, 1298.

C12H16O2Hg 1) o-Tolylmercury isovaleriate, preparation, properties, 346; p-tolylmercury isovaleriate, preparation, properties, 346.

C12H17ON 1) Racemic N-propyltetrahydroquinoline oxide, salts, 1098; 2) racemic N-isopropyltetrahydroquinoline oxide, salts, 1098; 3) p-tert-butylacetanilide, preparation, 1488.

C₁₂H₁₈OS 2,3,6-Trimethyl-4-vinylethinyltetrahydrothiopyran-4-ol, synthesis, properties, dehydration, 404.

C₁₂H₁₈O₆P₂ 5,8-Diphosphonemethyl-1,2,3,4-tetrahydronaphthalene, preparation, properties, 1299.

C₁₂H₁₉O₂P n-Butyl ester of p-tolyl phosphinous acid, preparation, properties, 1212.

C₁₂H₂₀ON₂ Isoammodendrine, structure, 1781.

C₁₂H₂₁O₃P α,α',α"-Trivinyltriethyl phosphite, preparation, properties, structure, bromination, 1550.

C₁₂H₂₂O₂S Dimethoxypentenylthio ether, formation, 890.

C₁₂H₂₃O₂N Piperidone, product of reaction of 7-methoxy-5-isobutyl-1,5-heptadien-4-one with NH₃, preparation, properties, semicarbazone, 1654.

C₁₂H₂₇O₃P Tributyl phosphite, action on 2-methyl-2-chlorobutyne-3, 102.

C₁₂H₂₇O₆P Di-β-ethoxyisopropyl ester of methoxymethylphosphinic acid, formation, properties, 108.

12 IV

- C₁₂H₇OCl₃Hg Product of mercuration of 2,4,6-trichlorophenol, 2173.
- C₁₂H₇O₇NHg Product of mercuration of 2,4,6-trinitrophenol, 2174.
- C12H8OCl2Hg Product of reaction of diphenylmercury with 2,4-dichlorophenol, 2173.
- C12H9OClHg Product of reaction of

diphenyl mercury with p-chlorophenol, 2172.

 $C_{12}H_{12}O_3N_2S$ Amino sulfamides of the

naphthalene series, 977.

C₁₂H₁₀O₂Cl₃P 1) Butyl ester of trichloromethyl-p-tolylphosphinic acid, preparation, properties, 1213; 2) isobutyl ester of trichloromethyl-ptolylphosphinic acid, preparation, properties, 1213.

Group C13

13 I

C₁₃H₁₂ Diphenylmethane, formation, 2250.

C₁₃H₁₈ 3,8-Dimethyl-1-vinyl-Δ¹,5-tetrahydroindene, preparation, properties, condensation, 917.

13 II

C₁₃H₁₀O₂ β-(Naphthyl-1)-acrylic acid, method of production, ethyl ester, 1539.

- Cl3H12O 1) Benzyl phenols (o- and p-) formation, 2240; 2) phenyl benzyl ether, formation, 2240; 3) styrylvinylethinyl-carbinol, synthesis, properties, hydrogenation, isomerization, 1163; 4) 7- phenyl-1,5-heptadien-3-yne,7-ol,preparation, properties, hydrogenation, isomerization, 1162.
- C₁₃H₁₂O₂ 2-Ethoxy-l-naphthaldehyde, preparation, properties, anil, 2383.

C₁₃H₁₂O₄ Malonic acid ester of the acid enol of benzalacetone, 469.

C₁₃H₁₄O 1) 7-Phenyl-1,3,5-heptatriene-5-ol, formation, 1164; 2) 7-phenyl-1,3,6heptatriene-5-ol, isomerization, 1164.

C₁₃H₁₄O₂ 1) β-Phenylethylfuryl carbinol, preparation, properties, isomerization, 1952; 2) 1-p-hydroxyphenyl-2,3-dimethyl-Δ^{1,2}-cyclopentene-5-one, preparation, properties, 1499.

C₁₃H₁₄O₃ Benzalacetoacetic ester, conden-

sation with piperylene, 83.

C₁₃H₁₅N 1) 4,6-Dimethyl-2-ethylquinoline, synthesis, 493; 2) 4,8-dimethyl-2-ethylquinoline, synthesis, 494.

C₁₃H₁₆O₃ 7-Phenyl-4-ketoheptanoic acid, preparation, properties, ethyl ester,

1955.

C₁₃H₁₈O 1) 3,8-Dimethyl-1-ethinyl-25tetrahydroindan-1-ol, preparation, properties, hydrogenation, 916; 2) 1-propoxy tetralin, preparation, condensation with succinic anhydride, 1216; 3) 1-vinyl-5-keto-9-methyl-Δ¹,2-octalin, preparation, properties, semicarbazone, condensation, 695; 4) 1-vinyl-3,8-dimethyl-5-keto-Δ'-hydrindene, preparation, properties, condensation, 703.

C₁₃H₁₈O₂ 1) 1-Ethinyl-5-keto-3,8-dimethylhexahydroindan-1-ol, preparation, properties, semicarbazone, hydrogenation, 702; 2) 1-ethinyl-6-keto-9-methyl-1-decalol, preparation, properties, semicarbazone, hydrogenation, 692.

C₁₃H₂₀O₇ 1) Pseudoionone, condensation with malonic anhydride, 462; 2) 7-phenyl heptane-5-ol, formation, properties, 1161; 3) 3,8-dimethyl-1-vinyl-Δ⁵-tetrahydroindane-1-ol, preparation, properties, dehydration, 916.

C₁₃H₂₀O₂ 1) 1-methoxy-2-methyl-3β-methoxypropyl-2,6-heptadiene-4-yne, preparation, properties, hydrogenation, 1901; 2) 1-vinyl-5-keto-3,8-dimethylhexahydroindane-1-ol, preparation, properties, dehydration, 703; 3) 1-vinyl-6-keto-9-methyl-1-decalol, preparation, properties, 2,4-dinitrophenyl hydrazone, dehydration, 693.

C₁₃H₂₀O₄ β-Lactone of methylidene malonic acid, preparation, properties, 463.

C₁₃H₂₂O 5-p-Methoxyphenylheptane, preparation, properties, 1498.

C₁₃H₂₂O₂ 1-Ethyl-6-keto-9-methyll-decalol, preparation, properties, semicarbazone, 693.

C₁₃H₂₂O₃ β-Methoxy propyl-β-methoxyisopropyl-vinyl ethinyl carbinol, preparation, properties, hydrogenation, dehydration, 1900.

C₁₃H₂₂O₅ Dipropyl ester of Y-keto pimelic acid, preparation, pro-

perties, 671.

C₁₃H₂₄O 1) Methylnonylacetylenyl carbinol, preparation, 1110; 2) 3,8-dimethyl-1-ethyl hydrindane-1-ol, preparation, properties, 916.

C13H24O2 Monoisoamyl ester of tetramethylbutynediol, preparation, properties, hydrogenation, action of

alkalies on, 757.

 $C_{13}H_{24}O_3$ 1) 1,7-dimethoxy-5-isobutyl-4-heptene-3-one, preparation, properties, ozonation, hydrogenation, demethylation, 1648; 2) 2,7-dimethoxy-5-isobutyl-5-heptene-4-one, preparation, properties, hydrogenation, fission of methanol from, 1652.

 $C_{13}H_{24}O_4$ 1,7-dimethoxy-5- β -methoxyethyl-4-octene-3-one, preparation, properties, hydrogenation, ozonation,

1900.

C13H24O6 Product of oxidation of 1methoxy-5-methyl-4-hexene-3-one, 2276.

C13H2602 Monoisoamyl ether of tetramethyl butenediol, preparation, properties, oxidation, 761.

C₁₃H₂₆O₃ 1,7-Dimethoxy-5-isobutylheptane-3-one, preparation, properties,

1648.

 $C_{13}H_{26}O_4$ 1,7-Dimethoxy-5- β -methoxyethyl-4-octene-3-one, preparation,

properties, 1900.

 $C_{13}H_{28}O_2$ 1) 5-\beta-methoxypropyl-6methyl-7-methoxyheptane, preparation, properties, 1901; 2) monoisoamyl ether of tetramethylbutandiol, preparation, properties, 762.

C₁₃H₂₈O₃ Butyl-β-methoxypropyl-β-methoxyiso-propyl-carbinol, preparation, pro-

perties, 1901.

C₁₃H₃₀Sn Tri-n-propyl-n-butyl-tin, action of BiCl3 on, 2077.

13 III

C₁₃H₇O₄N (5-nitronaphthyl-1)-propiolic acid, preparation, properties, derivatives, 1543.

C₁₃H₉O₄N β-(5-nitronaphthyl-1) acrylic acid, preparation, properties, derivatives, alkamino esters and dialkylamino alkyl esters, 1071.

C₁₃H₁₁OBr p-Bromphenylbenzyl ether, formation, 2278.

 $C_{13}H_{11}O_2N$ 1-(\alpha-Furyl)-5-(\alpha-pyrryl)-2pentadiene-1,3-one-5, preparation, properties, 1129.

C₁₃H₁₁O₄N l-Methylskatolidene-malonic acid, preparation, properties, trans-

formation, 2292.

C₁₃H₁₁NS 3-Methyl-2-methylene-α-naphthothiazoline, preparation, properties,

- reaction with methyl and ethyl iodides, 156.
- ClaHl2ON2 Diphenylurea, reaction with amines, 983.
- ClaH12OHg Products of the mercuration of cresols, 2174, 2175.
- $C_{13}H_{13}ON_3$ N, N'-Di-(\beta-cyanoethyl)benzamide, preparation, properties, 1117.
- C13H17O3N3 Dioxypyramidon, synthesis, absorption spectrum, 1729.

Cle 127022 n-Propyl ester of p-tolylphosphinous acid, 1211.

C₁₃H₂₅O₃P 2-Methyl-4-dibutylphosphonebutadiene-2,3, preparation, properties, 102.

C13H27O2Cl Heptylbutylchloroacetal, formation, properties,

C₁₃H₂₉O₆P Di-β-ethoxyisopropyl ester of ethoxymethyl phosphinic acid, formation, properties, 108.

13 IV

ClaHeO3N4S p-Nitrobenzoylaminopiazothiole, preparation, properties, 1984.

 $C_{13}H_{11}ONS$ 4-Methyl-3-oxodihydro-(α naphtho-1,4-thiazine), preparation, 1978.

C₁₃H₁₁O₂N₃S₂ Amino-sulfamide of the naphthalene series, 977.

C₁₃H₁₁O₃NHg Product of the reaction of dibenzyl mercury and p-nitrophenol, 2172.

C₁₃H₁₂O₂N₂S α-Aminopyridide of styrenesulfonic acid, preparation, properties, 1944.

C₁₃H₁₅ON₂Br 3-Methyl-1-phenyl-4() bromopropyl)-pyrazolone-5, preparation, properties, 1950.

Group C14

14 I

C14H10 Anthracene, electrolytic reduction, 871; reaction with PC15 and PBr₅, 363.

 $C_{14}H_{12}$ 1) 1-Vinylethinyl-3,4-dihydronaphthalene, preparation, hydrogenation, hydration, 1363; 2) stilbene, formation, 2324.

C₁₄H₁₄ 1) 1,1-Diphenylethane, formation, 331,478; 2)1,2-diphenylethane, formation, 332, 478; 3) 5-phenyl-6-methyl1,5-heptadiene-3-yne, preparation, properties, transformation, 1504; 4) 1-methyl-4-benzylbenzene, formation, 2251.

C₁₄H₁₆ Butylnaphthalene, formation, 487. C₁₄H₁₈ 1) 1-Vinylethinyloctalin, preparation, hydrogenation, hydration, 1359; 2) vinylethinyl camphene, preparation, properties, transformation, 2258.

C₁₄H_{2O} Allylcamphenyl ketone, preparation, properties, transformation, 2259.

C₁₄H₂₂ 1) 5-Phenyl-6-methylheptane, preparation, properties, 1504; 2) dibutylbenzene, formation, 486; 3) 1,2,4,5-tetraethyl benzene, formation, 469.

C₁₄H₂₄ Product of dehydration of methylethylallyl carbinol, 441.

C₁₄H₂₆ Butyldihydrocamphene, preparation, properties, 2258.

14 II

C₁₄H₈Cl₂ 9,10-Dichloroanthracene, preparation, 363.

C₁₄H₈Br 9,10-Dibromoanthracene, preparation, 364.

C₁₄H₉Cl 9-Chloroanthracene, formation, action of PCl₅ on, 363.

C₁₄H₉Br 9-Bromoanthracene, formation, action of PCl₅ on, 364.

C₁₄H₁₂O₃ 3-Methoxy-4-hydroxybenzophenone, preparation, properties, structure, 374.

C₁₄H₁₂O₄ 1) 2-Ethoxy naphthoyl-1-formic acid, preparation, properties, derivatives, 2381; 2) β-(2-hydroxy-naphthoyl-1)-propionic acid, preparation, reduction, ethyl ester, 2380; 3) β-(2-hydroxy-6-naphthoyl)-propionic acid, reduction, ethyl ester, 2414.

C₁₄H₁₄O 1) Benzylbenzyl alcohol, formation, 2239; 2) 5-p-methoxyphenyl-1,5-heptadiene-3-yne, preparation, properties, transformations, 1498; 3) 3-methyl-4,5-dihydro-6,7-benzindane-1-one, preparation, hydrogenation, dehydrogenation, 1367; 4) 1-methoxy-4-benzyl benzene, formation, 2252.

C₁₄H₁₄O₃ 1) \(\(\) (2-Hydroxy-1-naphthyl) - butyric acid, preparation, properties, 2415; 2) \(\) (2-hydroxy-6-naphthyl) - butyric acid, preparation, properties, 2414.

C₁₄H₁₄Hg 1) Dibenzylmercury, reaction with phenols, 2172; 2) p-di-tolylmer-

cury, photo reaction with iodobenzene, 178; interaction with organic acids, 345; 3) o-ditolylmercury, photo reaction with iodobenzene, 179; with benzyl iodide, 180; photo reactions of, 183; interaction with organic acids, 345.

C₁₄H₁₆O 1) Isopropylphenylvinylethinyl carbinol, preparation, properties, transformations, 1504; 2) 5-phenyl-6-methyl-1,5-heptadiene-4-one, preparation, properties, transformations, 1505; 3) 1-phenyl-2,2,3-trimethyl-4³,4-cyclopentene-5-one, preparation, properties, transformations, semicarbazone, 1505.

C₁₄H₁₆O₂ 1) 1-p-Methoxyphenyl-2,3,
 dimethyl-Δ¹, cyclopentene-5-one,
 preparation, properties, trans formations, semicarbazone, 1499;
 2) 3-methyl-2-phenyl-Δ⁴-cyclohex enecarboxylic acid, preparation,
 properties, dehydrogenation, 85.

C₁₄H₁₆O₃ 2-methyl-6-phenyl-Δ³-cyclohexene-1-carboxylic acid, formation, silver salt, dehydrogenation, 84.

C₁₄H₁₆O₄ 1) 1-Hydroxytetrahydronaphthoyl-4-propionic acid, preparation, properties, ethyl ester, 1221; 2) benzalmalonic ester, condensation with piperylene, 82.

C₁₄H₁₈O 3-Methyl- $\Delta^{b,9}$ -octahydro-6,7-benzindane-1-one, preparation, properties, 2,4-dinitrophenylhydrazone, hydrogenation, 1361.

C₁₄H₁₈O₂ 1) 2,2,5,5-tetramethyl-3-phenoxy-2,5-dihydrofuran, preparation, proof of structure, properties, 926; 2) 2,2,5,5-tetramethyl-3-p-hydroxyphenyl-2,5-dihydrofuran, preparation, properties, proof of structure, 926.

C₁₄H₁₈O₃ l-Hydroxytetrahydronaphthyl-4-butyric acid, preparation, properties, 1222.

C₁₄H₁₈S 2-Methyl-4-vinylethinyltetrahydrothichroman, preparation, properties, 405.

C₁₄H₂₀O 1) 1-Vinylethinyl-1-decalol, preparation, properties, hydrogenation, dehydration, cyclization, 1358; 2) 1-butoxytetralin, preparation, condensation with succinic anhydride, 1218; 3) 3-methyldecahydro-6,7-benzindane-1-one, preparation, properties, derivatives, 1362; 4) 2vinylethinyl-borneol, synthesis, trans-

formations, 2255.

C₁₄H₂₀O₂ ·1) 1-Ethinyl-6-methoxy-9-methyl-1-octalol, preparation, properties, hydrogenation, hydrolysis, 692; 2) 1ethinyl-5-methoxy-3,8-dimethyltetrahydroindan-1-ol, preparation, properties, 697; 3) allyl-a-octalyl ketones, preparation, hydrogenation, cyclization, 1360; 4) 2,2,5,5-tetramethyl-3phenoxy-tetrahydrofuran, preparation, properties, 927; 5) methyl ether of acetylenic keto alcohol, 702.

C14H22O Isopropyl-phenylbutyl carbinol,

preparation, properties, 1504.

 $C_{14}H_{22}O_2$ 1) 1-Vinyl-6-methoxy-9-methyl-1-octalol, preparation, properties, hydrolysis, isomerization, dehydration, 693; 2) diethyl ether of 2,7-dimethylocta-3,5-diyne-2,7-diol, preparation, properties, 763; 3) 1-methoxy-1-vinyl-6-keto-9-methyldecalin, preparation, hydrogenation, 694; 4) tetrahydropyrone, product of hydration of allylcamphenyl ketone, 2260.

C₁₄H₂₂O₃ Ethyl ester of 2,5,6 trimethyl- $1-acetyl-\Delta^3$ -cyclohexene-1-carboxylic acid, preparation, properties, saponi-

fication, semicarbazone, 974.

C₁₄H₂₄O Propyldihydrocamphenyl ketone, preparation, properties, 2259.

C₁₄H₂₄O₂ 1-Ethyl-6-methoxy-9-methyl-1-octanol, preparation, hydrolysis, 692.

C₁₄H₂₆O 2-Butyl-borneol, preparation, properties, 2258.

C14H30S2 Isomeric disulfides, synthesis, properties, 2160.

14 III

C₁₄H₈O₄N₂ l-Amino-4-nitroanthraquinone. preparation, properties, absorption spectrum, 1567.

C14H8ClBr 9-Chloro-10-bromoanthracena preparation, 364.

C₁₄H₉O₂N l-Amino-anthraquinone, preparation, absorption spectrum, 1567.

C₁₄H₉O₃N 1-Amino-4-hydroxyguinone. preparation, properties, absorption spectrum, 1567.

C₁₄H₈O₆N 5-Nitro-1-naphthalmalonic acid, preparation, properties, decarboxylation, 1074.

C₁₄H₁₀O₂N₂ 1,4-Diamino-anthraquinone, preparation, properties, absorption spectrum, 1567.

C14H22ON2 1) 1-Ethoxyphenazine, synthesis, properties, picrate, 1696; 2) 1-methoxy-5-methyl phenazine, synthesis, properties, picrate, 1694; 3) 1-methoxy-7-methyl phenazine, synthesis, properties, picrate, 1694.

C₁₄H₁₂O₂N₂ 1) 1,5-Dimethoxyphenazine, synthesis, properties, 1695; 2) 1,7dimethoxyphenazine, synthesis, pro-

perties, 1695.

C14H12O2Hg p-Tolylmercury benzoate, preparation, properties, 347.

C₁₄H₁₂O₃Hg 1) p-Tolylmercury salicylate, preparation, properties, 347; 2) o-tolylmercury salicylate, preparation, properties, 348.

 $C_{14}H_{12}O_{4}N_{2}$ 1) N-(3-nitrophenacyl)p-aminophenol, preparation, properties, coloring power, 740; 2) N-(3-nitrophenacyl)-m-aminophenol, preparation, properties, coloring power, 740.

 $C_{14}H_{13}O_2N$ 1) (α -Furyl)-5-(α -pyrryl)-2-methylpentadiene-1,3-one-5, pre-

paration, properties, 1129.

C14H14S2Hg Product of reaction of p-thiocresol with diphenyl mercury, 2168.

C14H14S2Pb Lead thiocresolate, preparation, properties, 2168.

C₁₄H₁₇O₂Br 2,2,5,5, tetramethyl-3phenoxy-4-bromo-2,5-dihydrofuran, preparation, properties, 926.

C₁₄H₁₇O₅N Product of reaction of hippuryl chloride with the ethyl ester of lactic acid, 1103.

 $C_{14}H_{18}O_2Br_2$ 2,2,5,5 - tetramethyl-3p-hydroxyphenyl-3,4-dibromotetrahydrofuran, preparation, properties, 929.

C14H20OS 2-Methyl-4-vinylethinylhexahydrothiochroman, preparation, properties, dehydration, 401.

C14H26OS 2-Methyl-4-butylhexahydrothiochroman-4-ol, preparation, properties, 401.

C₁₄H₂₆O₂S Diethoxypentenyl thio ether, formation, properties, oxidation, 889.

C₁₄H₃₁O₆P Di-β-ethoxyisopropyl ester of propoxymethylphosphinic acid, formation, properties, 108.

C₁₄H₈O₄N₂S 2-(p-Nitrophenyl)-benzothiazole-6-carboxylic acid, prepara-

tion, derivatives, 876.

C₁₄H₁₀O₂N₂S 1) 2-(p-aminophenol)benzothiazole-6-carboxylic acid, derivatives, 1877; 2) 6-methyl-2-(p-nitrophenyl)-benzothiazole, preparation, properties, 1875.

C₁₄H₁₂ON₄C₁₂5'-Chloropyridylamide of β-(5-chloropyridyl-2)-amino crotonic acid, preparation, properties, 1962.

C₁₄H₁₂ON₄Br₂ 5'-Bromopyridylamide of β-(5-bromopyridyl-2)-amino crotonic acid, preparation, properties, 1962.

C₁₄H₁₂ON₄I₂ 5'-Iodopyridylamide of β-(5-iodopyridyl-2)-amino crotonic acid, preparation, properties, 1962.

C₁₄H₁₆O₂S₂Sn Product: of reaction of p-thiocresol with tetraphenyl

tin, 2169.

C₁₄H₁₈O₂N₂S 1) β-Diethylaminoethyl ester of benzothiazole-2-carboxylic acid, preparation, properties, picrate, 1238; 2) β-diethylaminoethyl ester of benzothiazole-6-carboxylic acid, preparation, properties, picrate, 1241.

C₁₄H₂₅O₂PSn Ethyl ester of phenylphosphonetriethyl tin, preparation, pro-

perties, 116.

14 V

C₁₄H₁₄O₄NClS 3,4-Dimethyl-a-naphtho-1,4-thiazine perchlorate, preparation, 1976.

Group C₁₅

15 I

C₁₅H₁₂ 9-Methyl anthracene, reaction with PCl₅, 364.

C₁₅H₁₆ 1) Diphenylpropane, formation, 482; 2) 1-phenyl-1-p-tolylethane, formation, 2252; 3) 1,3-dimethyl-5-benzylbenzene, formation, 2251.

C₁₅H₁₈ Palustrazulene, preparation, pro-

perties, picrate, 777.

C₁₅H₂₄ 1) Palustrene, preparation, properties, structure, hydrogenation, dehydrogenation, 777; 2) palustrediene, preparation, properties, structure, dehydrogenation, hydrogenation, 777.

·C₁₅H₂₆ 1) Dihydropalustrene, preparation, properties, 777; 2) dihydro-

palustrediene, preparation, properties, 777; 3) dihydroshairene, preparation, properties, hydrogenation, 193.

C₁₅H₂₈ 1) Tetrahydropalustrediene, preparation, properties, 777; 2) tetrahydroshairene, preparation, properties, 193.

15 II

C₁₅H₁₁Cl 9-Methyl-10-chloroanthracene, preparation, properties, 364.

C₁₅H₁₁Br 9-Methyl-10-bromoanthracene, preparation, properties, 365.

C₁₅H₁₂O₄ Diphenylhydroxypyruvic acid, preparation, properties, semicarbazone, 2321.

C₁₅H₁₂O₅ Methoxydiphenyl-2,3-dicarboxylic acid, preparation, properties, dimethyl ester, distillation with Zn dust, 1584.

C₁₅H₁₄O Cinnamyl phenyl ether, synthesis, mechanism of Claissen re-

arrangement in, 1965.

C₁₅H₁₄O₃ 1) γ-(2-Methoxy-1-naphthy1)butyrolactone, preparation, properties, 2416; 2) γ-(2-methoxy-6naphthy1)-butyrolactone, preparation, properties, 2416.

C₁₅H₁₄O₄ 2-Methoxy-naphthoyl-1-propionic

acid, cleavage, 2380.

C₁₅H₁₆O₃ \(\(\) -(2-Methoxy-l-naphthyl)-but-yric acid, preparation, properties, hydrolysis, 2415.

C₁₅H₁₆O₄ 2-Methyl-6-phenyl-∆³-cyclohexene-1,1-dicarboxylic acid, preparation, decarboxylation, dehydro-

genation, ethyl ester, 82.

C₁₅H₁₈O 1) 3-Methyl-2-phenyl-1-acetyl-Δ⁴-cyclohexene, preparation, properties, semicarbazone, 84; 2) 2-methyl-6phenyl-1-acetyl-Δ-cyclohexene, preparation, properties, 84.

C₁₅H₁₈O₂ 1) 1-(α-furyl)-9-methyldecatriene-1,3,5-one-7, preparation, properties, 1129; 2) 1-(α-furyl)-8,8-dimethylnonatriene-1,3,5-one-7,

synthesis, properties, 1129.

C₁₅H₂₀O₂ 1) 1-(α-furyl)-undecadienel,3, preparation, properties, 1129;
2) keto enol, product of condensation of l-vinyl- Λ-cyclohexene with 1,3dimethyl- Λ'-cyclopentene-4,5-dione, 567.

C₁₅H₂₀N₄ Di-(2-dimethylamino-5-pyridyl)-

methane, preparation, 1232.

C₁₅H₂₂O₂ Product of hydrogenation of the

keto enol $C_{15}H_{20}O_2$, 567.

C₁₅H₂₄O₂ 1) β-Methoxypropylcamphenyl ketone, preparation, properties, cleavage of methanol from, 2259; 2) β-methoxylpropyl-a-octalylketones, preparation, cleavage of methanol from, ozonation,

C₁₅H₂₆O 1) Palustrol, preparation, properties, hydrogenation, dehydration, structure, 777; 2) shairol, quantitative determination of double bonds in, 191.

C₁₅H₂₆O₂ Shairol dxide, formation, pro-

perties, 195.

C15H26O5 1) Dibutyl ester of &-ketopimelic acid, preparation, properties, 671; 2) di-isobutyl ester of Y-ketopimelic acid, preparation, properties, 671.

C₁₅H₂₈O Dihydroshairol, preparation, properties, dehydration, 193.

15 III

C₁₅H₉O₆N₅ 6-Picrylaminoquinoline, preparation, properties, 341.

C₁₅H₁₁O₃N 1-Amino-4-methoxyanthraquinone, preparation, properties, absorption spectrum, 1569.

C15H12N2S 2'-Amino-1,2-dihydrophenanthrothiazole-3,4, preparation, properties, derivatives, 1723.

C₁₅H₁₃OBr \alpha-Bromodibenzylketone, reaction with salts of carboxylic acids, 1348.

 $C_{15}H_{13}O_2N$ l-(\alpha-furyl)-7-(\alpha-pyrryl)-heptatriene-1,3,5-one-7, preparation, properties, 1129.

C₁₅H₁₄ON₂ 1) 1-Ethoxy-7-methylphenazine, synthesis, properties, picrate, 1696; 2) 1-ethoxy-5-methylphenazine, preparabion, properties, picrate, 1696.

 $C_{15}H_{14}O_{2}N_{2}$ 1) 1-Ethoxy-2-methoxyphenazine, synthesis, properties, picrate, 1696; 2) 1-methoxy-5-ethoxyphenazine, synthesis, properties, 1695; 3) 1-methoxy-7ethoxyphenazine, synthesis, properties, picrate, 1695.

 $C_{15}H_{14}O_4N_2$ 1) N-(3-nitrophenacyl)-p-anisidine, preparation, properties, coloring power, 739; 2) N-(3-nitrophenacyl)-

m-anisidine, preparation, properties, coloring power, 739.

C₁₅H₁₆ON₂ 4-Dimethylaminobenzanilide. azo compound, 300.

C₁₅H₁₈ON₄ Di-(2-dimethylamino-5pyridyl)-thioketone, preparation, properties, picrate, 1232.

C₁₅H₁₈O₃P Ethyl ether of 2-phosphonemethylnaphthalene, synthesis, pro-

perties, hydrolysis, 1298.

C₁₅H₂₀ON₂ 1) 2-Phenyl-3-keto-6-namyltetrahydropyridazine, preparation, properties, 1728; 2) 2-phenyl-3-keto-6-o-isoamyltetrahydropyridazine, preparation, properties, 1728.

C₁₅H₂₀ON₆ N, N'-di-(2-Dimethylamino-

pyridyl-5)-urea, 952.

C₁₅H₂₅O₂P 1) n-Butyl ester of ptolyl phosphinous acid, preparation, properties, action of CHaI on, 1212; 2) isobutyl ester of p-tolyl phosphinous acid, preparation, properties, 1213.

C₁₅H₂₇O₃P \(\alpha,\alpha',\alpha''\)-triethyltriallyl phosphite, preparation, properties,

bromination, 1552.

 $C_{15}H_{32}O_6P_2$ 2-Methyl-3,4-di-(diethylphosphone)-hexene-2, formation, pro-

perties, oxidation, 101.

 $C_{15}H_{33}O_6P$ 1) Di- β -ethoxyisopropyl ester of β-ethoxyisopropylphosphinic acid, formation, properties, 110; 2) di-β-ethoxyisopropyl ester of butoxymethylphosphinic acid, formation, properties, 110; 3)tri-β-ethoxyisopropyl ester of phosphorous acid, preparation, action of CH3I on, isomerization, 107.

15 IV

C₁₅H₁₂O₂N₂S Sulfamide of the naphthalene series, 979.

C15H13O2N3S Amino sulfamide of the naphthalene series, 979.

C15H13O3N3S2 Amino sulfamide of the

naphthalene series, 979.

C₁₅H₁₈O₂N₂S 1/β-Piperidinoethyl ester of benzothiazole-2-carboxylic acid, preparation, properties, 1239; 2) βpiperidinoethyl ester of benzothiazole-6-carboxylic acid, preparation, properties, 1241.

C₁₅H₁₉OPSn Diphenyltrimethylstannyl phosphine oxide, preparation, pro-

perties, 118.

C₁₅H₂₀O₂N₂S 1) %-Diethylamino propyl ester of benzothiazole-2-carboxylic

acid, preparation, properties, picrate, 1238; 2) %-diethylaminopropyl ester of benzothiazole-6-carboxylic acid, preparation, properties, picrate, 1241.

Group C16

16 I

C₁₆H₁₄ 9,10 Dimethylanthracene, formation, 331.

Closup Cl

16 II

C₁₆H₁₀O₂ Diphenylbutynedione, preparation, 1314.

C₁₆H₁₄O₂ 1) Benzyl ester of cinnamic acid, reaction with Mg organic compounds, 2323; 2) diphenylbutynediol, oxidation, 1314.

CleH₁₆O₃ 1) %-(2-ethoxy-1-naphthyl)butyrolactone, preparation, properties, 2416; 2) %-(2-ethoxy-6-naphthyl)-butyrolactone, preparation, properties, 2417.

CleH₁₆O₄ 1) Ethyl ester of 2-ethoxy-naphthoyl-formic acid, preparation, properties, 2382; 2) ethyl ester of 2-hydroxy naphthoyl-l-propionic acid, preparation, properties, alkylation, 2381; 3) 2-ethoxy-naphthoyl-l-propionic acid, cleavage, 2380; reduction, ethyl ester, 2413; 4) β-(2-ethoxy-6-naphthoyl)-propionic acid oxidation, reduction, ethyl ester, oxime, 2413; 5) ethyl ester of β-(2-hydroxy-6-naphthoyl)-propionic acid, preparation, properties, 2414.

C₁₆H₁₈O₂ 1) 1,3 - diphenyl-2-methylpropanediol-1,2, preparation, properties, 1351; 2) 1,1 - dianisylethane,

formation, 332.

C₁₆H₁₈O₃ %-(2-ethoxy-1-naphthyl)butyric acid, preparation, properties, hydrolysis, 2415.

C₁₆H₂₀O₂ Butyl-β-naphthyl acetal,

preparation, 650.

C₁₆H₂₀O₃ 1) Ethyl ester of 2,6 dimethyll-acetyl-Δ³-cyclohexene carboxylic acid, preparation, saponification, 83; 2) product of condensation of β-vinyloctalin with maleic anhydride, 566. C₁₆H₂₂O₄ Acid ester of enolic pseudoionone, preparation, 467.

C₁₆H₃₀O₂ 1) Tetrapropylbutynediol, preparation, properties, 292; 2) tetraiosopropylbutynediol, preparation, properties, 291.

C₁₆H₃₁N Nitrile of palmitic acid,

preparation, 305.

C₁₆H₃₄S₂ Isomeric disulfides, synthesis, properties, 2160.

C₁₆H₃₅Sn Tetra-n-butyl-tin, action of BiCl₃ on, 2075.

16 III

C₁₆H₁₁O₆N₅ Methyl betaine of 6-picryl-aminoquinoline, preparation, properties, 341.

C₁₆H₁₂O₄N₄ Methyl betaine of 6-(2',4'-dinitroanilino)-quinoline, preparation,

properties, 340

C₁₆H₁₄ON₂ 4-Phenyl-3-benzyl-5-pyrazolone, preparation, properties, 1329.

C₁₆H₁₄O₂N₂ 1-Amino-4-dimethylaminoanthraquinone, preparation, properties, absorption spectrum, 1567.

C₁₆H₁₅O₄N₃ 1) N-(3-Nitrophenacyl)p-aminoacetanilide, preparation, properties, coloring power, 741; 2) N-(3-nitrophenacyl)-m-aminoacetanilide, preparation, properties, coloring power, 741.

C₁₈H₁₈O₂N₂ 1) 1,5-Diethoxyphenazine, synthesis, properties, 1697; 2) 1,7diethoxyphenazine, synthesis, pro-

perties, picrate, 1697.

C₁₆H₁₇O₃N₃ 1)N-(3-Nitrophenacy1)-pamino dimethyl aniline, preparation, properties, coloring power, 741; 2) N-(3-nitrophenacy1)-m-aminodimethylaniline, preparation, properties, coloring power, 742.

C₁₆H₃₃O₂Cl Di-heptylchloroacetal, for-

mation, properties, 659.

16 IV

C₁₆H₁₃N₂IS₂ Bis-[3-methylbenzothiazole-(2)]-monomethinecyanineiodide, synthesis, properties, absorption of light, 144.

C₁₆H₂₂O₄P₂Sn Methyl ester of di-(phenyl-phosphone)-dimethyl-tin, preparation,

properties, 117.

Group C₁₇

C17H14O Dibenzal acetone, formation, 2323.

 $C_{17}H_{14}O_{2}$ 1-(α -Furyl)-7-phenyl-heptatriene-1,3,5-one-7, preparation, pro-

perties, 1129.

C₁₇H₁₆O 1) Di-p-tolylacetylenylcarbinol, preparation, properties, hydrogenation, 1109; 2) ethyl-9-phenanthryl carbinol, preparation, properties, 1254; 3) dimethyl-9-phenanthryl carbinol, preparation, properties, 1254.

 $C_{17}H_{18}O_2$ 1-(\alpha-Furyl)-5-(p-tolyl)-2methylpentadiene-1,3-one-5, preparation,

properties, 1129.

 $C_{17}H_{12}N_2$ $\beta-(4'-dimethylaminophenyl)-\alpha$ phenylacrylonitrile, azo compound, 301.

C17H200 Di-p-tolylethylcarbinol, preparation, properties, 1112.

 $C_{17}H_{22}O_2$ 1-(α -Furyl)-tridecatriene-1,3,5one-7, preparation, properties, 1129.

- $C_{17}H_{22}O_4$ 1) 9,11-Dimethyl- Δ^4 , 6-octahydrofluorene 1,2-dicarboxylic acid, preparation, anhydride, methyl ester, 917; 2) β -(1-propoxy-5,6,7,8-tetrahydronaphthoy1-4)-propionic acid, preparation, properties, methyl ester, 1217.
- C₁₇H₂₂O₅ 1) 7-Keto-13-methyldodecahydrophenanthrene-1,2-dicarboxylic acid, preparation, properties, semicarbazone, 695; 2) 9,11-dimethyl-7-ketodecahydrofluorene-1,2-dicarboxylic acid, properties, anhydride, ethyl ester, 704.

C17H22N2 4, 4'-bis-dimethylaminodiphenyl-

methane-azo compound, 301.

C₁₇H₂₆O 1-Heptoxytetralin, preparation, condensation with succinic anhydride, 1219.

C17H3005 Di-isoamyl ester of K-ketopimelic acid, preparation, properties, 671.

17 III

C17H15O3N Ethyl ester of (5-acetaminonaphthyl-1)-propiolic acid, preparation, properties, 1546.

 $C_{17}H_{15}NS$ 3-Methyl-4,5-diphenyl-2methylenebenzothiazolene, preparation, properties, reaction with methyl and ethyl iodides, 157.

C₁₇H₁₇O₃N Ethyl ester of β-(5-acetaminonaphthyl-1)-acrylic acid, 1077.

C₁₇H₁₈O₄N₂ β-Dimethylaminoethyl ester of β-(5-nitronaphthyl-1)acrylic acid, hydrochloride, preparation, properties, reduction, 1077.

C17H200N2 4, 4'-bis-dimethylaminobenzophenone, azo compound, 301.

C17H20O2N2 B-Dimethylaminoethyl ester of β -(5-aminonaphthyl-1)acrylic acid, hydrochloride, 1077.

C17H21O2N Cocculin, isolation, properties, salts, methylation, struc-

ture, 391; 1577.

C17H21O2N3 2-Nitro-4,4'-bis-dimethylaminodiphenylmethane, azo compound, 301.

17 IV

C17H15O3N3S Aminosulfamid of the naphthalene series, 977.

C17H16O2N2S Methyl betaine of 6-(p-toluene-sulfamino)-quinoline. preparation, properties, 342.

Group C18

18 I

CleH12 Naphthacene, preparation, 547; chlorination, 1771.

C₁₈H₂₄ Dibutylnaphthalene, formation, 480.

18 II

C₁₈H₁₀O₄ 1) Ethyne diphthalide, conversion to hydroxy naphthacenequinone and naphthacene, 549; 2) bis-diketohydrindene, conversion to naphthacene, 547; 3) dihydroxynaphthacenequinone, preparation, 548.

C18H12Cl2 Dichloronaphthacene, preparation, structure, action of maleic anhydride on, 1771.

C₁₈H₁₅Bi Triphenyl bismuth, reaction

with thiophenols, 2167.

 $C_{18}H_{16}O_2$ 1) 1-(α -Furyl)-7-phenyl-2methyl-heptatriene 1,3,6-one-5, preparation, properties, 1128; 2) 1-(α-furyl)-7-(p-tolyl)-heptatriene-1,3,6-one-5, preparation, properties, 1128.

 $C_{18}H_{16}O_3$ 1,2-Di-(p-hydroxyphenyl)-3-

methyl-A¹,²-cyclopenten-5-one, preparation, properties, reduction, oxime, 1496.

ClaH180 1) n-Propyl-9-phenanthrylcarbinol, preparation, properties, 1254; 2) isopropyl-9-phenanthrylcarbinol, preparation, properties, 1255; 3) methylethyl-9-phenanthrylcarbinol, prepara-

tion, properties, 1254.

C₁₈H₁₈O₂ 1) 2-Methyl-5,5-diphenylpentandione-3,4, preparation, properties, derivatives, oxidation, 2310; 2) 2,2dimethyl-5,5-diphenyltetrahydrofuranone-3, preparation, properties, semicarbazone, 2309, 2312; 3) asymmetrical dimethyldiphenylbutindiol (2-methyl-5,5diphenylpentin-3-diol-2,5), isomerization, 2309; condensation with ethyl alcohol. 2317.

C18H18N4 N-(1-Naphthyl-4-azobenzene)ethylenediamine, synthesis, 2367; use for the determination of penicillin,

ClaH2002 1) Dimers of anol, formation, estrogenic activity, 2279; 2) 4-3,5-(p,p-hydroxyphenyl)-4-methylpentene (isoanol), preparation, properties, derivatives, 2283; 3) 6,4'-dihydroxy-2-methyl-3-ethyl-1-phenylindane, preparation, properties, estrogenic activity, 2284.

C₁₈H₂₀O₄ 2-Methyl-5,5-diphenylpentandiol-2,5-one-3,4, preparation, pro-

perties, dehydration, 2318.

 $C_{18}H_{22}O_3$ 1) Ethyl ester of 2-methyl-6phenyl-1-acetyl-\Delta^3-cyclohexene-1-carboxylic acid, preparation, properties, saponification, 83; 2) ethyl ester of 3-methyl-2-phenyl-1-acetyl- Λ^4 -cyclohexenecarboxylic acid, preparation, properties, saponification, 83.

C₁₈H₂₂N₄ 4-Dimethylamino benzaldazine,

azo compounds, 299.

 $C_{18}H_{22}O_4$ β -(1-Butoxy-5,6,7,8-tetrahydronaphthoyl-4)-propionic acid, preparation, properties, methyl ester, 1218.

 $C_{18}H_{28}O_2$ 1-(α -Furyl)-tetradecadiene-1,3one-5, preparation, properties, 1129.

C₁₈H₃₀O₂ p-Tetratolylbutinediol, syn-

thesis, oxidation, 1315.

C₁₈H₃₄O₂ 1) Oleic acid, condensation with formaldehyde, 1517; 2) petroselinic acid, existence in coriander oil, structure, 641.

C18H38S2 Isomeric disulfides, synthe-

sis, properties, 2159.

18 III

ClaHaOcClo Dichloronaphthacenequinone, structure, 551.

ClaHaOccl Chloronaphthacene-quinone, structure, 551.

ClaH402Hg2 Product of mercuration of resorcinol, 2174.

C₁₈H₁₅O₄N 5-Keto-2-phenyl-4-(2',5'dimethoxybenzylidene)-4,5-dihydrooxanol, synthesis, properties, conversion to d,1-2,5-dihydroxyphenylalanine, 386.

ClaH15S3Bi Bismuth thiophenolate, preparation, properties, 2168.

ClaH2302N Cocculidine, isolation, properties, salts, structure, 391,

ClaH2505N Renardin, isolation, properties, structure, 1989.

C18H33O3P a,a',a"-Tripropyl-triallyl phosphite, properties, 1553.

ClaH3402S Dibutoxypentenylthio ether, formation, properties, 889.

C₁₈H₃₄O₆P₂ Dimer of 2-methyl-4-diethylphosphonebutadiene-2,3, 102.

C₁₈H₃₉O₆P Tri-β-isopropoxyisopropylphosphite, preparation, properties, 109.

18 IV

C18H11OCl3Hg2 Product of mercuration of 2,4,6-trichlorophenol, 2173.

C18H11OCl2Hg2 Product of mercuration of 2,4-dichlorophenol, 2173.

C₁₈H₁₂O₅N₂Hg₂ Product of reaction of diphenyl mercury with 2,4dinitrophenol, 2173.

C18H13O3NHg2 Product of reaction of phenyl mercury acetate with p-

nitrophenol, 2174.

C₁₈H₁₅O₂BrHg Product of reaction of diphenyl mercury with bromohydroquinone, 2172.

ClaH17N2IS2 Bis-[3-methyl benzothiazole-(2)]-8-methylmonomethinecyanine iodide, synthesis, properties, absorption of light, 144.

C₁₈H₂₅OPSn Diphenyltriethylstannylphosphine oxide, preparation, pro-

perties, 118.

Group C19

19 II

C₁₉H₁₆O₂ 1-(α-Furyl)-9-phenylnonatetraene - 1,3,5,8-one-7, preparation, properties, 1129.

C₁₉H₁₈O₃ Product of demethylation of 1,2-di-(p-methoxyphenyl)-3-methy-\(\alpha^1,^2\)-cyclopentene-5-one, 1497.

C₁₉H₂₂O₂ 2,2,3-Trimethyl-5,5-diphenyltetrahydrofuranol-3,preparation, pro-

perties, oxidation, 2312.

C₁₉H₂₄O₃ Ethyl ester of 2,5-dimethyl-1phenylacetyl-Δ³-cyclohexene-1-carboxylic acid, preparation, properties, 974.

- C₁₉H₂₆O₂ Ketoenol, product of condensation of 1-vinyl-Δ'-octalin with 1,3-dimethyl-Δ'-cyclopentene-4,5-dione, 568.
- C₁₈H₂₈O Tetracyclic ketone of steroid type, synthesis, properties, derivatives, 565.

C₁₉H₂₈O₂ Ketoenol, product of hydrogenation of ketoenol C₁₉H₂₆O₂, 568.

- C₁₇H₃₀O Tetracyclic ketones, products of hydrogenation of ketones C₁₈H₂₈O, 565.
- C₁₉H₃₄O₄ Keto-aldo acid, product of ozonation of the acid C₂₁H₃₈O₄, 1526.
- C₁₉H₃₆O₄ Keto-oxy acid, product of ozonation of the acid C₂₁H₃₈O₄, 1526.

19 III

C₁₉H₁₄ON₄ NN'-Diquinolyl-6-urea, preparation, properties, hydrogenation, 960.

C₁₉H₁₄O₂N₂ Dibenzoyl-2-amino pyridine,

formation, properties, 201.

C₁₉H₁₅O₅N 5-Keto-2-phenyl-4-(2'-acetoxy-5'-methoxybenzylidene)-4,5-dihydro oxazole, synthesis, properties, conversion to d,1-2,5-dihydroxyphenylalanine, 386.

CleH16OHg2 Products of mercuration of

cresols, 2174, 2175.

C₁₉H₁₆O₃N₂ Derivatives of pyridonimine, product of condensation of benzoyl chloride with 2-aminopyridine, 199.

C₁₉H₂₀O₄N₂ β-Diethylaminoethyl ester of (5-nitronaphthyl-1)-propionic acid, hydrochloride, citrate, preparation, properties, 1546.

C₁₉H₂₂ON₄ NN'-di-(1,2,3,4-tetrahydroquinolyl-6)-urea, preparation, properties,

959.

 $C_{18}H_{22}O_4N_2$ β -Diethylaminoethyl ester of β (5-nitronaphthyl-1) acrylic acid,

hydrochloride, preparation, properties, reduction, 1078.

C₁₉H₂₃ON Des-N-dimethylcocculidin, preparation, properties, hydrochloride, methiodide, action of KOH and AgOH on, 1583.

perties, reduction, 1080.

C₁₉H₂₄O₂N₂ β-Diethylaminoethyl ester of β-(5-aminonaphthyl-1)-acrylic acid, hydrochloride, 1078.

C₁₉H₂₅ON₃ \(-Dimethylamino-α-methyl-propylamide of β-(5-aminonaphthyl-l)-acrylic acid, citrate, 1080.

C₁₉H₂₅O₂N Des-N-methyl cocculidin, preparation, properties, action of AgOH on, methiodide, action of AgOH and KOH on methiodide, 1582.

C₁₉H₂₆ON₂ Benzyl-isoammodendrin, preparation, properties, hydro-

chloride, 1786.

C₁₉H₂₆O₂N₂ β-Diethylaminoethyl ester of β-(5-aminonaphthyl-1)-propionic acid, hydrochloride, 1081.

C₁₉H₂₇O₇N Othosenine, isolation, 1993.

19 IV

C₁₈H₁₆NIS Methyliodide of 2-β-tetralylmethylbenzothiazoline, synthesis, properties, 147.

C₁₉H₁₈N₃BrS₂ Product of reaction of 3-methyl-2-methylenebenzthiazoline with cyanogen bromide, 1977.

C₁₉H₂₁N₂IS₂ Product of the action of methyl iodide on 3-methyl-2-methylenebenzothiazoline, preparation, hydrolysis, 154.

19 V

C₁₉H₁₄ONFS₂ 2-(3'-Ethyl-6'-fluorobenzthiazolinylidene-2'-ethylidene)-3-oxo-2,3-dihydrothionaphthene, preparation, properties, absorption maximum, 2192.

C19H16O4NClS 3-Phenyl-4-methyl-a-naphtho-1,4-thiazine perchlorate, preparation,

1976.

C₁₉H₁₇N₂IF₂S₂ Biz-3-Ethyl-6-fluorobenzthiazole-(2)-methincyanine iodide, preparation, properties, absorption maximum, 2192. C18H18N2IFS2 3-Ethyl-6-fluorobenzthiazole-(2)-5-ethylbenzthiazole-(2)-methincyanine iodide, preparation, properties, absorption maximum, 2192.

C₁₉H₂₀N₂IFS Iodoethylate of 2-p-dimethylaminostyryl-6-fluorobenzthiazole, pre-

paration, properties, 2192.

Group C20

20 I

C20H18 Di-benzylbenzene, formation, 2251.

20 II

C20H14Hg a-Dinapthyl mercury, photo reaction, 585.

C₂₀H₁₆O₂ Product of the acid transformation of 3-methoxyfuchsone, preparation, properties, acetyl derivative, 575.

C20H180 Products of condensation of ben-

zyl alcohol with phenol, 2239.

C₂₀H₁₈O₂ 5,6-di-(p-Methoxyphenyl)-1,5 hexadiene-3-yne, preparation, hydrogenation, hydration and cyclization, 1494.

C₂₀H₂₀O₃ 1,2-di-(p-Methoxyphenyl)-3methyl-Δ¹,²-cyclopentene-5-one, preparation, properties, transformations,

oxime, 1496.

C₂₀H₂₂O₂ 1) Dimethyl-di-p-tolylbutynediol, preparation, properties, modifications, 1933; 2) 2,2-dimethyl-5,5diphenyl-3-ethoxydihydrofuran-2,5, preparation, properties, oxidation, 2317.

C20H22O3 1,2-di-(p-Methoxyphenyl)-3methylcyclopentane-5-one, preparation,

properties, oxime, 1496.

C₂₀H₂₄O₂ 1) Methyl ester of isoanol, 2284; 2) methyl ester of polyanol, 2283; 3) metanethol, preparation, demethylation, 2284.

C20H26O2 1) Dimethyl-di-p-tolylbutinediol, preparation, properties, 1938; 2) 5,6-di-(p-methoxyphenyl)-hexane, preparation, demethylation, 1495; 3) tetracyclic diketone, preparation, properties, 920.

C20H26O₄ Diethyl ester of 2,5-dimethyl-6-phenyl-A³-cyclohexene-1,1dicarboxylic acid, preparation, pro-

perties, 974.

C20H26O6 Product of autoxidation of resin acids, 1271.

- C20H28O Tetracyclic steroid ketone, preparation, properties, 2,4-dinitro phenyl hydrazone, hydrogenation, 919.
- $C_{20}H_{28}O_2$ 1) 1-(α -Furyl)-hexadecatriene-1,3,5-one-7, preparation, properties, 1129; 2) isomeric 15-methylandrostene-3,17-dione with the methylcyclopentane ring B, synthesis, properties, 697; 3) stereoisomer of $\Delta^{8,9}$ -15-methylandrostene-3,17-dione, synthesis, properties, 685.

C₂₀H₂₈O₄ β(Hexoxy-5,6,7,8-tetrahydro-naphthoyl-4) propionic acid, preparation, properties, 1220.

C20H300 Tetracyclic steroid ketone, preparation, properties, reduction, 2,4-dinitrophenyl hydrazone, 919.

C20H30O2 1) Glycol, product of condensation of mesityl oxide with acetylene, 292; 2) abietic acid, mechanism of autoxidation, 1271.

C20H30O6 Product of autoxidation of resin acids, 1271.

C20H42S2 Isomeric disulfides, synthesis, properties, 2160.

20 III

C20H₁₄O₂N₂ 1-Amino-4-phenylaminoanthraquinone, preparation, properties, absorption spectrum, 1567.

C20H₁₅O₆N 5-Keto-2-phenyl-4-(2',5'-diacetoxybenzylidene)-4,5-dihydroxazole, synthesis, properties, conversion to 2,5-dioxyphenyl alanine, 385.

C20H₁₅O₃N Thalmin, isolation, properties, derivatives, 1200.

C20H25O4N Thalicmidin, isolation, properties, derivatives, 1204.

C₂₀H₂₆O₂N₂ %-Diethylaminopropyl ester of β-(5-amino naphthyl-1) acrylic acid, hydrochloride, 1079.

C20H34O8P2 Ether of 5,8-diphosphonemethyl-1,2,3,4-tetrahydronaphthalene, preparation, properties, hydrolysis, 1298.

20 IV

C20H16O4N2S2 Sulfamide of the naphthalene series, 978.

C20H1704N3S2 Aminosulfamide of the

naphthalene series, 977.

C20H21O4N3S β-Diethylaminoethyl ester of 2-(p-nitrophenyl-)-benzthiazole-6-carboxylic acid, preparation, properties, 1877.

C20H22O2N2S β-Diethylaminoethyl ester of 2-phenylbenzthiazole-6-carboxylic acid, preparation, properties, picrate,

1874.

C20H23O2N3S β-Diethylaminoethyl ester of 2-(p-aminophenyl)-benzthiazole-6carboxylic acid, preparation, proper-

ties, hydrochloride, 1878.

C20H23N2IS2 1) Product of reaction of 3-methyl-2-methylenebenzthiazolene with ethyl iodide, preparation, hydrolysis, 155; 2) product of reaction of 3-ethyl-2-methylenebenzthiazolene with methyl iodide, preparation, hydrolysis, 156.

C20H30O4P3Sn Ethyl ester of diphenylphosphone-diethyl tin, preparation, proper-

ties, 117.

C20H37O2PSn Ethyl ester of phenylphosphone-tri-n-butyl tin, preparation, properties, 116.

20 V

C20H21ON2ClS2 Product of reaction of 3-methyl- 2 -methylenebenzothiazolene

with acetyl chloride, 1976.

C20H23O4N2ClS 1) Ethyl perchlorate of 2-(p-dimethylamino-α-methyl styryl)benzothiazole, synthesis, absorption spectrum, 543; 2) ethyl perchlorate of 2-(p-dimethylamino-α-methyl styryl)-benzothiazole, synthesis, absorption spectrum, 543.

Group C21

21 I

C21H20 Dibenzyltoluene, formation, 2251. C21H38 1,1,3-Tricyclohexylpropane, preparation, properties, 2327.

21 II

C21H16O4 Cinnamylidene-cinnamal malonate, preparation, properties, 629.

C21H18O4 Product of the acid transformation of 3,3'-dimethoxybenz-

aurin, 576.

C21H220 1) 2,3-Diphenyl-6,6-dimethylheptadiene-1,3-one-5, preparation, properties, oxidation, semicarbazone, 95; 2) 3,3'-diphenyl-6,6-dimethylheptyne-4-one-2, formation, properties, semicarbazone, oxidation, 92.

C21H24O2 1) Methyl-diphenyl-tertbutylacetylenyl-ethylene glycol (2,3-diphenyl-6,6-dimethyl-heptyl-4-diol-2,3), synthesis, transformation by sulfuric acid, 87; 2) 2,3diphenyl-6.6-dimethyl-heptene-3-ol-2-one-5, formation, properties, oxidation, dehydration, 93.

C₂₁H₃₀O₄ 1-Heptoxy-5,6,7,8-tetrahydronaphthoyl-4-propionic acid, preparation, properties, 1220.

C21H38O3 Unsaturated acid, product of the action of alkali on the substance C21H39O3Cl, preparation, properties, structure, 1523.

C21H38O4 Ketoacid, product of oxidation of the substance C21H40O4, preparation, properties, derivatives, structure, 1521.

C21H40O4 Product of condensation of oleic acid with formaldehyde, preparation, transformations, structure, 1520.

C21H42O n-Didecyl ketone, condensation with acetylene, 292.

21 III

C21H12O5N2 1-Benzoylamino-4-nitroanthraquinone, preparation, properties, absorption spectrum, 1573.

C21H13O3N 1-Benzoylamino-anthraquinone, preparation, properties, absorption spectrum, 1573.

C21H13O4N 1-Benzoylamino-4-hydroxyanthraquinone, preparation, properties, absorption spectrum, 1573.

C21H14O2N2 1-Amino-4-benzoylaminoanthraguinone, preparation, properties, absorption spectrum, 1567.

C21H19ON 9-(Dimethylaminophenyl)xanthene, azo compound, 300.

C21H25O4N Thalmidin, isolation, properties, derivatives, 1201.

C21H25O5N Thalicmine, isolation, properties, derivatives, 1197.

C₂₁H₃₉O₃Cl Product of chlorination of the substance C₂₁H₄₀O₄, 1521.

C₂₁H₃₉O₃P α,α',α"-Trivinyltriamylphosphite, preparation, properties, action of CCl₄ on, bromination, 1553.

21 IV

C₂₁H₂₁O₄N₃S β-Piperidinoethyl ester of 2-(p-nitrophenyl)-benzothiazole-6-carboxylic acid, preparation, properties, 1877.

C₂₁H₂₂O₂N₂S β-Piperidinoethyl ester of 2-phenylbenzothiazole-6-carboxylic acid, preparation, properties, 1875.

C₂₁H₂₃O₂N₃S β-Piperidino ethyl ester of 2-(p-aminophenyl)-benzthiazole-6-carboxylic acid, preparation, properties, 1878.

C₂₁H₂₃O₄N₃S \(\) -Diethylaminopropyl ester of 2-(p-nitrophenyl)-benzthiazole-6-carboxylic acid, preparation, proper-

ties, 1877.

C₂₁H₂₄O₂N₂S \(\) -Diethylaminopropyl ester of 2-phenylbenzthiazole-6-carboxylic acid, preparation, properties, pic-rate, 1875.

C₂₁H₂₅O₂N₃S (-Diethylaminopropyl ester of 2-(p-aminophenyl)-benzothiazole-6carboxylic acid, preparation, proper-

ties, picrate, 1878.

21 V

C21H19N2IF2S2 Bis-3-ethyl-6-fluorobenzthiazole-(2)-trimethinecyanine iodide, preparation, properties, absorption maximum, 2191.

C₂₁H₂₀N₂IFS 3-Ethyl-6-fluorobenzthiazole-(2)-1-ethylquinoline-(2)-methinecyanine iodide, preparation, properties, absorption maximum, 2192.

C₂₁H₂₃ON₂ClS₂ Product of reaction of 3-methyl-2-methylene benzothiazolene

with chloroacetone, 1974.

C₂₁H₂₅O₄N₂ClS Ethyl perchlorate of 2-(p-dimethylamino-β-ethylstyryl)benzothiazole, synthesis, absorption spectrum, 543.

Group 22

22 II

C₂₂H₄₆S₂ Isomeric disulfides, synthesis, properties, 2160.

22 III

C₂₂H₁₅O₄N 1-Benzoyl amino-4methoxyanthraquinone, properties, absorption spectrum, 1573.

C₂₂H₁₈ON₂ 1,4-Diphenyl-3-benzyl-5pyrazolone, preparation, 1328.

C₂₂H₂₉O₃N₃ & Diethylamino-α-methylbutylamide of β-(5-nitronaphthyll)-acrylic acid, preparation, properties, reduction, 1081.

C₂₂H₃₁ON₃ Ω-Diethylamino-α-methylbutylamide of β-(5-aminonaphthyll)-acrylic acid, citrate, 1081.

22 IV

C₂₂H₁₈O₄N₂S 1) 3-(β-anthraquinone-sulfamino)-N,N-dimethylaniline, preparation, properties, 1868; 2) 4-(β-anthraquinone sulfamino)-N,N'-dimethylaniline, preparation, properties, 1867.

C22H19O5N3S2 Aminosulfamide of the

naphthalene series, 977.

C₂₂H₃₄O₄P₂Sn Ethyl ester of di-(phenylphosphone)-di-n-propyl tin, preparation, properties, 118.

22 V

C22H21N2IF2S2 Bis-3-ethyl-6-fluorobenzothiazole-(2)-8-methyltrimethinecyanine iodide, preparation, properties, absorption maximum, 2191.

C23H23N2IF2S2 Bis-3-ethyl-6-fluorobenzothiazole-(2)-8-ethyltrimethinecyanine iodide, preparation, properties, absorption maximum, 2191.

C₂₂H₂₅O₂N₂IS₂ Product of reaction of 3-methyl-2-methylenebenzothiazolene with the ethyl ester of iodoacetic acid, 1978.

Group C23

23 II

C23H26N2 4,4'-Bis-dimethylaminotriphenylmethane, azo compounds, 300.

23 III

C23H18O3N2 1-Benzoylamino-4-dimethyl-

aminoanthraquinone, preparation, properties, absorption spectrum, 1573.

C₂₃H₁₉O₂N α-(1-Methyl-3-phenyl-2-indolyl)-phenylacetic acid, preparation, properties, thermal decarboxylation, 1332.

C23H25O2N3 1) 2"-nitro-4,4'-bis-dimethylaminotriphenylmethane, azo compound, 300; 2) 3"-nitro-4,4'-bisdimethylaminotriphenylmethane, azo compound, 300; 3) 4"-nitro-4,4'-bisdimethylaminotriphenylmethane, azo compound, 300.

C23H26ON2 4,4'-bis-dimethylaminotriphenyl carbinol, azo compound, 300. C23H48O6P2 2-Methyl-3,4-d1-(dibutyl phosphone)-hexene 2, formation, 103.

23 IV

C₂₃H₁₄O₄N₂S 6-(β-Anthraquinone-sulfamino)-quinoline, preparation, properties, 1868.

C₂₃H₁₉O₉NS Methyl-p-toluene-sulfonate of 6-picrylaminoquinoline, preparation, properties, action of alkalies on, 341. C₂₃H₂₀O₄N₂S 1) Methyl betaine of 3-(β-

C₂₃H₂₀O₄N₂S 1) Methyl betaine of 3-(β-anthraquinonesulfamino)-N,N-dimethyl aniline, preparation, properties, 1867; 2) methyl betaine of 4-(β-anthraquinonesulfamino)-N,N-dimethylaniline, preparation, properties, 1868.

C23H20O7N4S Methyl-p-toluene sulfonate of 6-(2',4'-dinitroanilino)-quinoline, preparation, properties, reaction with

NaOH, 340.

23 V

C₂₃H₂₁N₂IF₂S₂ bis-3-Ethyl-6-fluorobenzthiazole-(2)-pentamethincyanine iodide, preparation, properties, absorption maximum, 2191.

C₂₃H₂₂N₂IFS 3-Ethyl-6-fluorobenzthiazole-(2)-l-ethylquinoline-(2)-trimethincyanine iodide, properties, absorption maximum, 2192.

Group C24

24 II

C24H20N2 Quinoxaline, product of reaction of 2-methyl-5,5-diphenylpentan-diol-2,5-one-3,4 with o-phenylenediamine, 2320.

C24H20Pb Tetraphenyl lead, reaction with thiophenols, 2167.

C₂₄H₂₀Sn Tetraphenyl tin, reaction with thiophenols, 2167.

C₂₄H₄₆O₂ Tetra-amylbutynediol, preparation, properties, 292.

24 III

C24H15O4N Methyl ester of N-phenyl-1(N), 9-anthrapyridone-2-carboxylic acid, preparation, absorption spectrum, 2307.

24 IV

C₂₄H₁₆O₄N₂S Methylbetaine of 6-(β-anthraquinonesulfamino)-quinoline, preparation, properties, 1868.

C24H24O5N2S2 Methyl-p-toluene sulfonate of 6-(p-toluene sulfamino)-quinoline, preparation, properties, action of ammonia on, 342.

24 V

C₂₄H₂₃O₄N₂ClS Phenyl perchlorate of 2-(p-dimethylamino-α-methylstyryl)-benzthiazole, synthesis, absorption spectrum, 544.

Group C25

25 III

C₂₅H₂₃O₂N Ethyl ester of α-(1methyl-3-phenyl-2-indolyl)-phenylacetic acid, preparation, properties, 1380.

C25H26O2N2 Methylphenylhydrazone of a, V-diphenylacetoacetic ester, preparation, properties, reduction, 1328.

25 IV

C₂₅H₂₁N₂IS₂ [3-Ethylbenzothiazole-(2)]-[3-phenylbenzothiazole-(2)-]trimethinecyanine iodide, synthesis, properties, absorption of light, 144.

25 V

C₂₅H₂₃ON₂IS₂ 'Product of reaction of 3-methyl-2-methylenebenzothiazoline with benzoyl chloride, 1977.

C₂₅H₂₃N₂IF₂S₂ bis-3-Ethyl-6-fluorobenzthiazole-(2)-heptamethincyanine iodide, preparation, properties, ab-

sorption maximum, 2191.

C25H24O4N2Cl2S Ethyl perchlorate of 2-(p-dimethylamino-β-phenylstyryl)-benzthiazole, synthesis, absorption spectrum, 544.

Group Cas

26 III

CasH₁₈O₂N 1) 9-Ethylanilidonaphthacenequinone-11,12, preparation, properties, 558; 2) 9-monoethylanilidonaphthacenequinone-11,12, preparation, 1778.

26 IV

C26H23N2IS2 1) [3-Ethylbenzothiazole-(2)]-[3-phenylbenzothiazole-(2)]-8-methyltrimethincyanine iodide, synthesis, properties, absorption of light, 145; 2) [3-ethylbenzothiazole-(2)]-[3-phenylbenzothiazole-(2)]-10-methyltrimethincyanine iodide, synthesis, properties, absorption of light, 145.

C26H26O2P2Sn Product of reaction of the ethyl ester of diphenylphosphinous acid with dimethyldiiodotin, 119.

26 V

C26H25ON2BrS2 Product of reaction of 3methyl-2-methylenebenzothiazoline, with ω -bromoacetophenone, 1975.

Group C27

27 II

C27H24O 1,1,3,3-Tetraphenylpropyl alcohol, preparation, hydrogenation, 2327. C27H24N2 Diphenylamineacrolein, synthesis, properties, 497.

27 III

C27H18O3N2 1-Benzoylamino-4-phenylaminoanthraquinone, preparation, properties. absorption spectrum, 1573.

27 IV

C27H19N2IS2 bis-[3-Phenylbenzothiazole-(2)]-monomethinecyanine iodide, absorption of light, 144.

C27H25N2IS2 Product of reaction of 3-methyl-2-methylene-a-naphthothiazoline with methyl iodide, preparation, hydrolysis, 156.

Group C28

28 II

Tetraphenylbutinediol, oxi-C28H22O2 dation, 1314.

CasHasSi Tetrabenzyl silicon, action of BiCl3 on, 2076.

28 III

C28H18O4N2 1,4-Dibenzoylaminoanthraquinone, preparation, properties, absorption spectrum, 1573.

28 IV

C28H21N2IS2 bis-[3-Phenylbenzothiazole-(2)]-8-methylmonomethinecyanine iodide, synthesis, properties, absorption of light, 144.

C28H27N2IS2 Product of reaction of 3-methyl-2-methylene-a-naphthothiazoline with ethyl iodide, prepara-

tion, properties, 157.

C28H30O2P2Sn Product of action of the ethyl ester of diphenylphosphinous acid on diethyldiiodo tin, 119.

Group C28

29 IV

C20H21N2IS2 Dyestuff, preparation, absorption of light, 145.

C29H23N2IS2 bis-[3-Phenylbenzthiazole-(2)]-8-ethylmonomethinecyanine iodide, synthesis, properties, ab-

sorption of light, 145.

C29H24O4N2S p-Dimethylamino-N-benzylanilide of β-anthraquinonesulfonic acid, preparation, properties, 1868.

29

C29H25O4N2C1S Phenyl perchlorate of 2-(p-dimethylamino-α-phenyl styryl)-benzthiazole, synthesis, absorption spectrum, 545.

C₂₉H₂₇ON₂IS₂ Product of reaction of 3-methyl-2-methylene-α-naphthothiazoline with iodoacetone, 1975.

Group C30

30 II

C₃₀H₂₂O a-Phenanthrylethylphenanthrylic ether, formation, 1253.

C₃₀H₂₆O₂ Symmetrical diphenyl-p-ditolylbutinediol, synthesis, oxidation, 1317.

30 IV

C₃₀H₂₃N₂IS₂ bis-[Phenylbenzthiazole-(2)]-8-methyl-trimethinecyanine iodide, synthesis, properties, absorption of light, 145.

C₃₀H₂₈O₇N₂ S₂ 1) Methyl-p-toluenesulfonate of 3-(β-anthraquinone sulfamino)-N,N-dimethylaniline, preparation, properties, 1867; 2) methyl-p-toluene sulfonate of 4-(β-anthraquinone sulfamino)-N,N-dimethyl aniline, preparation, properties, conversion to betaine, 1867.

30 V

C₃₀H₂₈O₂N₂IS₂ Product of reaction of 3-methyl-2-methylene-α-naphthothiazoline with ethyl iodoacetate, 1978.

Group C31

31 IV

 $C_{31}H_{24}O_7N_2S_2$ Methyl-p-toluene sulfonate of 6-(β -anthraquinonesulfamino)-quinoline, synthesis, properties, 1868.

31 V

C₃₁H₂₅O₄N₂ClS₂ bis-[3-Methylbenzthiazole-(2)]-8,10-diphenyltrimethinecyanine perchlorate, synthesis, properties, absorption of light, 146.

Group Cas

32 II

C₃₂H₂₆O₅ Product of oxidation of tetraphenylbutinediol, 1314.

Group C34

34 II

C₃₄H₃₀O₅ 2,5-Diphenyl-2,5-p-ditolyl-3,4-diacetyldihydrofuran, preparation, 1319.

34 III

C₃₄H₂₈O₂N₂ 9,10-Diethylanilidonaphthacene quinone-11,12, preparation, properties, 558.

34 V

C₃₄H₂₄O₁₆N₆S₄Na₄ Direct pure blue dyestuff, reduction with silver and sodium sulfite, 1847.

 $C_{34}H_{29}ON_2BrS_2$ Product of reaction of 3-methyl-2-methylene- α -naphthothiazoline with ω -bromoacetophenone, 1976.

Group C35

35 IV

C₃₅H₃₃N₂IS₂ Product of reaction of 3-methyl-4,5-diphenyl-2-methylene thiazolene, with methyl iodide, preparation, hydrolysis, 159.

Group Cae

36 II

C₃₆H₃₄O₅ 2,2,5,5-Tetratolyl-3,4-diacetyldihydrofuran-3,4, preparation, 1316.

36 IV

C₃₆H₃₅N₂IS₂ Product of reaction of 3-methyl-4,5-diphenyl-2-methylenethiazoline with ethyl iodide, preparation, hydrolysis, 158.

Group C37

C₃₇H₃₄O₇N₂S₂ Methyl-p-toluene sulfonate of the p-dimethylamino-N-benzylanilide of β-anthraquinone-sulfonic acid, preparation, properties, 1868.

Group Cas

C38H46O7N2 Thalictrinin, isolation, properties, 1779.

Group Cap

- C₃₉H₂₉O₄N₂ClS₂ bis-[3-Methylbenzothiazole-(2)]-8,10-α-dinaphthyltrimethinecyanine perchlorate, synthesis, properties, absorption of light, 146.
- C₃₉H₃₇O₄N₂ClS₂ bis-[3-Methylbenzothiazole-(2)]-8,10-di-β-tetralyltrimethinecyanine perchlorate, synthesis, properties, absorption of light, 146.

Group C41

C₄₁H₂₉O₄N₂ bis-[3-Methylbenzothiazole-(2)]-8,10-dimethyltrimethinecyanine iodide, preparation, properties, absorption of light, 145.

Group C44

C₄₄H₈₆O₂ Tetradecylbutyne derivative, synthesis, properties, 292.

Group C49

- C₄₉H₃₃O₄N₂ClS₂ bis-[3-Phenylbenzo-thiazole-(2)]-8,10-di-α-naphthyl-trimethine perchlorate, preparation, properties, absorption of light, 145.
- C₄₉H₄₁O₄N₂ClS₂ bis-[3-Phenylbenzo-thiazole-(2)]-8,10-di-β-tetralyltrimethinecyanine perchlorate, preparation, properties, absorption of light, 145.

Group C71

C₇₁H₁₀₄O₂₁ Polymers of a-ketooxide, 2272.



